# UNIVERSITY of NORTH TEXAS HEALTH SCIENCE CENTER at Fort Worth

# Texas College of Osteopathic Medicine



2006-2007 Catalog

Doctor of Osteopathic Medicine 

Master of Physician Assistant Studies



The formation of America's seventh osteopathic medical school began with the effort of several osteopathic physicians who saw a need in Texas for a college of medicine that would focus its energies on the education of primary care physicians.

Evolving over the next three decades, the school remained loyal to the vision of its founders while expanding the educational experience to ensure it's graduates are among the finest physicians in the nation.

Today, almost three-fourths of TCOM's graduates practice primary care medicine—one of the highest percentages in the nation. Other graduates are leaders in specialty careers as diverse as aerospace medicine, vascular surgery and heart transplant surgery.

University of North Texas Health Science Center

Texas College of Opterpation

Graduate School of

School of Public Reside

edical Sciences

Located in the heart of Fort Worth's Cultural District, Texas College of Osteopathic Medicine is the cornerstone school of the University of North Texas Health Science Center. This 18-acre, \$120 million medical and research complex sits among parks, museums and treelined streets rather than in the concrete world of a central hospital district.

The modern building complex covers two city blocks and includes classrooms, science laboratories, an ambulatory patient care center, six research institutes, a physical activity complex, student lounge, art gallery, administrative offices and one of the most advanced medical libraries in the Southwest.

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# A MESSAGE FROM THE DEAN

Welcome to the University of North Texas Health Science Center's Texas College of Osteopathic Medicine, where we are "Educating the Physician and Physician Assistant of Tomorrow Through the Quest for Knowledge Today."

It is an exciting time in health care: a time in which the human genome has been translated; clinical decisions are becoming "outcomes" based; and the health of an individual has become the paramount focus. Here at Fort Worth's medical school, we continue a tradition of educating our students in an atmosphere that is steeped in a culture of holistic caring for patients, with a focus on both prevention and wellness. In addition, our students learn from renowned physicians, scientists, and physician assistants in an environment of cutting-edge clinical practice, scientific discovery, and scholarly activity.

Our health science center campus is a unique setting, bringing together our medical school with a Graduate School for Biomedical Sciences, a School for Public Health and a new College of Health Professions. This setting fosters a milieu



for collaboration and scientific investigation. The campus continues to grow, with the opening of our new Center for BioHealth. This center will provide for novel research into the diseases that have afflicted mankind for millennia. In addition, the Health Science Center purchased the adjoining campus of the former Osteopathic Medical Center of Texas. With that acquisition, we have effectively doubled our campus size, allowing for expansion of programs in public health, clinical services, and research. Leading research on our campus today includes studies into the spread of tuberculosis: Alzheimer's disease and aging; diabetes

and metabolic disorders; public health issues and many more. The Texas College of Osteopathic Medicine has established the national Osteopathic Research Center on our campus. This opportunity has allowed us to play a pivotal role in coordinating national studies, as well as performing specific studies into the distinctive osteopathic philosophy of healthcare and prevention that has played an important part in American medicine for over 130 years.

The Texas College of Osteopathic Medicine continues to educate physicians to practice in all medical specialties, from neurosurgery, anesthesiology, and radiology, to family medicine and internal medicine, just to name a few. However, we are proud of our tradition of training excellent primary care physicians and physician assistants. We have been recognized yearly for our excellence in graduating students who provide primary care service to the underserved of Texas. I am quite proud that our commitment to excellence has been recognized for the past five years by being named "One of the Top Medicals Schools" in the nation for primary care by *U.S. News & World Report.* 

Having entered the 21<sup>st</sup> Century, there has never been a more exciting time to be involved in healthcare.

The advances that have occurred in the last decade, and those we are currently exploring, will make the preservation of health and the treatment of disease more sophisticated and successful. Our DO and PA programs will continue to be national leaders in the training of excellent physicians and physician assistants due to the brilliance and dedication of our students and faculty.

Marc B. Hahn, DO

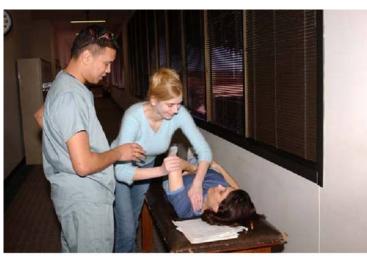
S C U.S. News & World Report has ranked Texas College of Osteopathic Medicine 28th in the nation for a primary carefocused medical education, one of only three Texas medical schools ranked in the top 50. TCOM has also repeatedly earned recognition from the Texas Academy of Family Physicians for the number of students entering family practice residencies following medical school. During the past five years, almost 70 percent of our graduates have opted for training in one of the areas of primary care, including family practice, pediatrics, general internal medicine and obstetrics/gynecology. Other graduates chose emergency medicine, surgery, anesthesiology or other medical specialties.

C C C

# TEXAS COLLEGE OF OSTEOPATHIC MEDICINE

exas College of Osteopathic Medicine is the cornerstone of UNT Health Science Center, one of the nation's distinguished academic medical centers dedicated to education, research and patient care. As the sole source of an osteopathic medical education in Texas,

Texas College of Osteopathic Medicine is unique among the state's eight medical schools. TCOM is a state and national leader in training physicians skilled in comprehensive primary care. Almost 65 percent of TCOM's medical students go on to practice primary care medicine, helping reduce the shortage of physicians in our Texas communities. To further address the shortage of medical care providers in rural and underserved communities. TCOM also offers a Master of Physician Assistant Studies program. These mid-level practitioners work under the guidance of physicians in providing preventive and primary health care services to patients.



Our graduates are physicians well prepared to practice all phases of medicine, whether your goal is to be the only family doctor in a small Texas town or one of the nation's top heart transplant surgeons. TCOM graduates already do both.

In fact, TCOM graduates earn spots in some of the most demanding residency programs in the nation, including the Mayo Clinic, Kennedy Memorial Hospital, Yale, The Cleveland Clinic, Baylor College of Medicine, and Scott & White Hospital.

Founded in 1970 as a private medical college, TCOM became a state-supported school under the University of North Texas jurisdiction in 1975. In response to TCOM's remarkable growth and its achievements in health care and science, the Texas Legislature redesignated the medical school as a health science center in 1993. TCOM is now one of four schools within the health science center, which includes a Graduate School of Biomedical Sciences, a School of Public Health, and a School of Health Professions.

TCOM's faculty are also practicing physicians and researchers, allowing them to keep abreast of the latest advances in medical science and patient care. This knowledge feeds directly into



the ongoing curriculum development process. Faculty members have always drawn upon their extensive realworld experience to illustrate concepts and enliven their teaching. This experience is also indispensable in TCOM's development of new, innovative teaching methods.

# **OUR VISION**

- A medical school that offers a state-of-the art curriculum, dynamic clinical rotations and unique graduate medical education
- A major contributor in clearly defined and well-focused medical research
- A strong clinical program that serves our community through collaborative and entrepreneurial efforts
- An organization that offers leadership to our profession and community

# ACADEMIC PROGRAMS

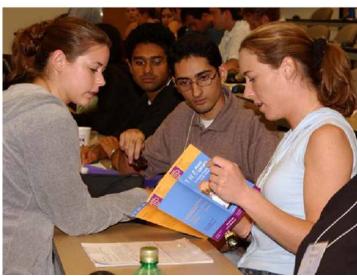
T exas College of Osteopathic Medicine is dedicated to the principles of academic excellence and constantly strives to improve the quality of its academic program. A primary goal is helping each student develop skills in self-learning and self-evaluation that will be necessary during formal education and throughout a professional career. Emphasis is placed on learning activities that help each student interact effectively with peers and promote cooperative relationships with others in the health professions. Teaching critical thinking and helping each student develop the skills required to make decisions in the clinical setting are central to all educational activities in the curriculum .

# **Doctor of Osteopathic Medicine Degree Program**

The Texas College of Osteopathic Medicine curriculum is a fouryear program leading to the degree of doctor of osteopathic medicine. Emphasis is placed on the identification and treatment of illnesses, promotion of health and wellness in patients, and treatment of each patient in the context of a wide variety of factors that influence health.



TCOM's curriculum is designed to help students integrate the basic and clinical sciences, further develop their ability to diagnose illness, and increase their understanding of the context within which medicine is practiced. Instruction in the first two years is presented according to organ systems of the body. TCOM is also dramatically increasing the use of instruction based on clinical cases. Instructors use an audience response system to quiz students on their understanding of diagnosis and pathophysiology in clinical cases. The instructional program also contains computer-assisted instruction, small-group teaching, state of the art robotic simulators, specialized workshops and simulated clinical experiences.



Evaluation of student performance is based on objective, structured clinical examinations, competency-based assessments, observational techniques and standard written tests.

Beginning with the first semester, students are placed in a variety of clinics and agencies to help them become familiar with the many facets of community health care and the health problems that will play a role in their lives as health care providers. These assignments provide a gradual transition from classroom to clinical settings.

# Rural Osteopathic Medical Education of Texas (ROME)

The University of North Texas Health Science Center at Fort Worth, and the Division of Rural

Medicine, Texas College of Osteopathic Medicine, has developed a special medical school curriculum, Rural Osteopathic Medical Education of Texas (ROME). The Health Science Center has set forth goals to be attained through this new, innovative rural educational program in preparing students for the practice of medicine in a rural environment. This rural medicine curriculum includes academic activities and clinical experiences beginning before matriculation and continuing throughout all four years of predoctoral medical education. These are completed in addition to the courses in the regular medical school curriculum.



The overall goals of this curriculum are:

- To provide a foundation for life and practice in a rural community.
- To provide an educational curriculum that will prepare the graduate for acceptance into premier graduate medical education programs.

The ROME curriculum provides students with a real world experience of living and working in rural Texas as well as knowledge and skills relevant to being a physician in a rural environment. Throughout the new curriculum, rural medicine students will work with faculty preceptors across the state. In addition, students participate in coursework on campus designed to convey relevant knowledge and skills. Clinical experiences include interaction with doctors and hospitals from the rural communities of Texas as well as urban tertiary centers.

# **Physician Assistant Studies Program**

The Master of Physician Assistant Studies (MPAS) degree program provides an exemplary education to physician assistant (PA) students planning for careers in primary health care, teaching and research. The PA program is housed within the Texas College of Osteopathic Medicine and supports the university's mission to teach primary healthcare and to develop interdisciplinary approaches to healthcare delivery.

As a program in the college of medicine, we are uniquely qualified to provide PA education in primary care. Students learn in campus classrooms as well as in clinics managed by the medical school. Students also accomplish clinical rotations in other locations throughout Dallas-Fort Worth and Texas. Faculty members have diverse backgrounds ranging from primary to specialty care in medical and surgical disciplines. In addition, students are taught by physician faculty and scientists in the college. Learning in this environment promotes mutual respect and understanding between these health-related professions.

The PA program is designed to teach the competencies required to practice as a PA. As members of the healthcare team, our graduates provide professional preventive and primary health care services to patients. As a master's level program, we place additional emphasis on defining healthcare needs of underserved populations and critical analysis of clinically-related research. Graduates obtain advanced knowledge and skills in implementing research protocols, analyzing outcomes, and making medical decisions based on population-based studies.

We encourage applications from individuals who are broadly representative of the ethnic, cultural and socioeconomic groups they wish to serve as practitioners. The MPAS degree program is accred-

ited by the Accreditation Review Commission on Education for the Physician Assistant since 1997. PA graduates are eligible to sit for the national certifying examination administered by the National Commission on Certification of Physician Assistants and required in most states for licensure as a PA.

# Joint and Accelerated Programs

UNT Health Science Center offers several joint and accelerated programs to meet the wide range of student needs and career goals.

The DO/PhD Medical Scientist Training Program and DO/MS dual-degree program are offered in conjunction with UNT Health Science Center's Graduate School of Biomedical Sciences. Students may choose to conduct research in a wide range of basic science disciplines to complement their medical interests, including cell biology and genetics, biochemistry and molecular biology, microbiol-ogy and immunology, physiology, and pharmacology and neuroscience.

A joint DO/MPH degree program offered in conjunction with the School of Public Health provides future osteopathic physicians with specialized training to develop, integrate and apply culturally competent social, psychological and biomedical approaches to the promotion and preservation of health.

TCOM also offers an accelerated baccalaureate/osteopathic physician program with the University of North Texas in Denton, The University of Texas at Dallas and The University of Texas at Arlington where students can earn both their baccalaureate and DO degrees in seven years instead of the usual eight.

Qualified students earn a bachelor's degree after successfully completing three years at UNT, UTD or UTA and the first year at TCOM. Upon completion of the final three years in the TCOM curriculum and all graduation requirements, students earn their doctor of osteopathic medicine degree.

Students in any of the seven-year combined Bachelor's/DO programs may select the option of also completing the MPH degree by adding one additional year to their program.

# **Postgraduate Training**

TCOM firmly endorses the completion of at least three years of postgraduate training following the doctor of osteopathic medicine degree program. All internship and residency programs sponsored by TCOM are affiliated with the Texas Osteopathic Postdoctoral Training Institutions (OPTI), a consortium of hospitals working with TCOM to provide quality osteopathic graduate education opportunities within the state.

# **Student Focus**

UNT Health Science Center strives to address the diverse needs of all students throughout their association with the institution. Through the institution's Division of Student Affairs, students are

provided with co-curricular and extracurricular programs, activities, and services to facilitate their academic training, professional growth and personal development. Student Affairs works in conjunction with the entire academic community to place an emphasis on student learning and to create a seamless learning environment between inand out-of-class experiences for students.

# **Division of Student Affairs**

The Division of Student Affairs is a full institutional partner in promoting student learning. It supports

co-curricular and extracurricular programming, activities and services to facilitate students' academic training, professional growth, and personal development. Additionally, the division assists the president of the health science center in interpreting students' needs, creating an atmosphere that stimulates learning, and integrates extracurricular experiences into the formal learning programs.

Through its administrative office and the offices of Academic Support, Financial Aid, the Registrar, Student Development, and International Student Services, the following goals are defined in support of the health science center's educational mission:

- Manage student enrollment, such that recruitment, retention and career development strategies result in graduates who portray those qualities important in the successful initiation of a professional career.
- Support the institutional culture and climate to effectively promote the professional and personal learning and growth of students.
- Support consistent development, creation, and implementation of institutional policies and guidelines to promote student success.
- Promote effective and timely communication that demonstrates a professional, caring, and supportive concern for prospective students, enrolled students, and alumni.

Personal, academic, and career counseling are available to students in the Office of Student Affairs. Personal counseling referrals for students and their families are available through the Student EAP.

In emergency situations, such as a death in the family, special assistance can be provided for notification of professors, medical withdrawal, etc. The office provides policy interpretation and rights adjustment upon request, handles disciplinary and social adjustment issues, and provides self-development opportunities and enrichment activities.



# Office of Student Affairs

- Encourages student participation in and contribution to the health science center's programs.
- Establishes and coordinates the system of student conduct and discipline.
- Interprets institutional regulations on academic and nonacademic matters related to students.
- Acts as a student advocate when appropriate.

For more information on the Office of Student Affairs, or any office within the Division of Student Affairs, please refer to the Student Affairs Website located at: <u>http://www.hsc.unt.edu/departments/studentaffairs/</u> or contact the Office of Student Affairs at 817-735-2505. Additional information including the student Handbook is located at:<u>http://students.hsc.unt.edu</u>.

# Office of Academic Support Services (OASIS)

We provide services designed to facilitate the academic success of all UNTHSC students. Working with faculty to provide direction and support to students in periods of academic difficulty, our staff can aid in planning alternate programs and assist in reassessment of student priorities.

Let's face it, we all need a little help once in a while, and that's what we are here for. Maybe you could benefit from a tutoring program, tips on time management or some basic academic counseling pointers.

# **Available Services**

Counseling in learning skills \* Time management skills \* Test-taking skills \* Peer-tutoring programs

# **Learning Strategies**

People learn in a variety of ways. Each student needs to find the most effective learning strategy for their personal needs. A wide range of factors goes into determining what works best for a student. Some students learn best in a quiet, solitary environment, some need verbal interaction in a group, others need to be physically active or have an environment rich in sound or other stimuli that would be considered "distracters" to fellow students. We can help you find and implement your best strategy through:

Assessment \* Counseling \* Workshops

# **Peer Tutoring Programs**

Tutoring programs provide the opportunity to share strategies for organizing and learning the large volume of material required to succeed in the graduate and medical school environment. Peer tutoring has the added benefit of helping both the student and their tutor to clarify and improve their understanding of the material being studied. We provide the following tutoring options:

Limited Individual Tutoring \* Supplemental Instruction (SI) Groups \* Large Group Tutorials \*

# **Drop-In Sessions**

For more information, or to make an appointment for study skills counseling, or to request tutoring assistance, contact Academic Support Services at:

817-735-2409 or 817-735-2407, or visit our website at: <u>www.hsc.unt.edu/departments/</u> Oasis/

# **Financial Aid Office**

- Provides students with educationally related financial assistance through a combination of available federal, state, institutional, and private funds.
- Administers and coordinates scholarship programs for the university.
- Administers and coordinates state and federal work-study programs for the university.
- Assists students with managing living expenses and the costs of their educational program.
- Provides financial aid certifications and resource verification letters to external agencies upon the student's request.
- Provides assistance, referrals, and resources to students in areas of loan repayment, debt management, consolidations, and scholarship applications.

For more information about these services, please contact the Financial Aid Office at 817-735-2505, or visit the website at: <u>www.hsc.unt.edu/departments/financialaid</u>.

# Office of the Registrar

- · Manages and maintains all academic records
- Oversees student enrollment and registration
- Facilitates processing of official transcripts
- Certifies enrollment and degree verification
- Serves as an information clearinghouse for students, the campus community and the general public
- Coordinates compliance with the Family Educational Rights and Privacy Act (FERPA)
- Provides Veteran Services
- Coordinates commencement and convocation

To review official policies related to FERPA (Family Education Rights and Privacy Act), Veterans benefits, and all other records-related information, please refer to the Student Handbook at <u>http://students.hsc.unt.edu</u>.

The Office of the Registrar can be reached at 817-735-2201. All Registrar-related forms can be obtained by visiting <u>www.hsc.unt.edu/departments/studentaffairs</u> and clicking on "forms".

# **Office of Student Development**

The Office of Student Development supports the mission of the Division of Student Affairs and the health science center. Its role is to address issues that are relative to all medical and graduate students, from pre-enrollment through graduation. This office coordinates programs and activities that promote the intellectual, professional, moral, social, physical and emotional development of all students.

There are four student-elected government councils representing each educational program at the health science center. They are the Medical Student Government Association (MSGA); Graduate Student Association (GSA); Public Health Student Association (PHSA); and the Physician Assistant Student Association (PASA). For more information on these associations please refer to the Student Government description elsewhere in this academic catalog.

The Office of Student Development oversees two lounge areas located on the first floor of EAD. The student lounge in EAD 116 has offices for the four student government associations, organizational storage, a computer room with four computers and networked printer (copy card operated), a copy machine (copy card operated), a telephone for on-campus and local calls, a fax machine, a big screen television, couches and chairs. It is a great place for students to relax, hang out, study, eat, and meet with faculty or friends. The lounge in EAD 110 has vending machines (coin operated), an ice machine, a sink, complimentary coffee, microwave ovens, restrooms, , recreational equipment (pool table, foosball tables, ping-pong tables), and tables and chairs for relaxing.

# Organizations

There are many student organizations on the health science center campus that represent a variety of interests within the health professions community. In cooperation with the Office of Student Development, they sponsor programs and activities that promote the intellectual, professional, social, physical and emotional development of all students. These organizations provide students with leadership opportunities at the local, regional and national levels. The Office of Student Development coordinates the student organization calendar and registration process.

The health science center recognizes the right of any group of students, faculty or staff to form a voluntary organization for purposes not forbidden by the laws of the United States and the state of Texas. All campus organizations that include enrolled students as members must be registered with the Office of Student Development and the Division of Student Affairs. Policies regulating the functioning, sponsorship and privileges of registered or recognized organizations are available in the Office of Student Affairs. For a list of active clubs and organizations please refer to the student handbook located at <a href="http://students.hsc.unt.edu">http://students.hsc.unt.edu</a>.

# **Scheduling Events**

Student organizations are required to schedule events, seminars, programs and lectures through the Office of Student Development. Please contact the Office of Student Development at 817-735-5006 for more information.

# Housing

The health science center does not provide on-campus student housing. However, students will find a variety of housing opportunities in the area. Every student is responsible for making his or her own housing arrangement. Please visit <u>http://students.hsc.unt.edu</u> and click on "housing opportunities" to see a current list of possible housing options.

The health science center does not assume any responsibility in housing arrangements but does support the federal housing policies that housing owners not discriminate because of race, color, gender, age, disability, veteran status or national origin.

For more information about these services, please contact the Student Development Office at 817-735-5006, or visit the website at: <u>www.hsc.unt.edu/departments/sdo/</u>.

# **International Student Services Office**

• Coordinates programs and activities that support international students from prematriculation through graduation.

For more information about these services, please contact the International Student Services Office at 817-735-2508.

# Founder's Activity Center

The Founders' Activity Center, located on the north end of campus, is open seven days a week to students, faculty and staff. The center features aerobics classes, regularly scheduled recreational sports, a multipurpose outdoor court and recreational equipment. Cardiovascular exercise equipment is also available, as well as free-weights and weight machines. Exercise and nutrition programs can be tailored to the individual by the center's staff. For more information and a current schedule of activities, please visit their website at <a href="http://www.hsc.unt.edu/fac/">http://www.hsc.unt.edu/fac/</a> or contact the health promotion manager at 817-735-2209.

# ACCREDITATION

For further information regarding the institution's accreditation's and state approval or to review related documents, contact the Office of Educational Affairs, Education and Administration Building, room 416B, 817-735-2510.

The University of North Texas Health Science Center at Fort Worth is approved by the Texas Higher Education Coordinating Board and is a member of the Alliance for Higher Education, the Association of Academic Health Centers, the Council for the Advancement and Support of Education and the Council of Graduate Schools.

The University of North Texas Health Science Center at Fort Worth is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097, telephone number 404-679-4501) to award master's and doctoral degrees. The Texas College of Osteopathic Medicine has received accreditation from the AOA Bureau of Professional Education of the American Osteopathic Association, which is the recognized accrediting agency for the approval of colleges preparing osteopathic physicians. The address and phone number of the accrediting agency are: Secretary, AOA Bureau of Professional Education; American Osteopathic Association; 142 East Ontario Street; Chicago, IL 60611; Telephone 312-202-8049; FAX 312-202-8202. TCOM is approved by the Texas State Board of Medical Examiners and is a member of the American Association of Colleges of Osteopathic Medicine. Accreditation was granted to the University of North Texas Health Science Center Physician Assistant Studies Program by the Committee on Accreditation of Allied Health Education Programs in April 1999. Program graduates are eligible to sit for national certifying examinations.

# 2006-2007 ACADEMIC CALENDAR

# Fall 2006

June 22, 2006 Year 3 D.O. Students begin Clinical Skills Clerkship

July 3, 2006 Electronic Registration for Years 1 and 2 D.O. students

**July 5, 2006** Clinical clerkships begin for Year 3 D.O. students

July 24-28, 2006 Orientation for Year 1 D.O. students

July 29, 2006 Family Day

**July 31, 2006** First day of fall classes for Years 1 and 2 D.O. students

August 4, 2006 Last day for Years 1 and 2 D.O. students to register for classes

August 18, 2006 Ranchland

August 25, 2006 Last day for Years 1 and 2 D.O. students to withdraw with partial refund of tuition and fees

September 4, 2006 Labor Day Holiday\*

September 8, 2006 White Coat Ceremony

November 23-24, 2006 Thanksgiving Holiday\*

**December 15, 2006** End of Semesters 1 and 3 D.O. program.

**December 22, 2006** Electronic submission of grades due to Registrar

**December 16 January 1, 2007** Winter Holiday\*

# Spring 2007

**January 2, 2007** First day of spring classes for Years 1 and 2 D.O. students

January 30, 2007 Last day for Years 1 and 2 D.O. students to withdraw with partial refund

March 12-16, 2007 Spring Break\*

April 6, 2007 Research Appreciation Day

**May 7, 2007** First day of Correlative Basic Science and Clinical Medicine Review for Year 2 D.O. students

May 11, 2007 Last day of classes for Year 4 D.O. students

# **Summer 2007**

May 19, 2007 Commencement, Class of 2007 D.O. students

May 25, 2007 Last day of classes for Year 2 D.O. students

May 28, 2007 Memorial Day Holiday\*

**June 1, 2007** Electronic submission of spring grades for Year 2 D.O. students are due to Registrar

June 29, 2007 Last day of classes for Year 1 D.O. students

#### July 6, 2007

Electronic submission of spring grades for Year 1 D.O. students are due to Registrar

# COMLEX Level 1

Online registration and information for Level 1: Comprehensive Osteopathic Medical Licensing Examination

(COMLEX) is available at <u>www.nbome.org</u>. The deadline for completion of COMLEX Level 1 for the Class of 2009 is June 20, 2007. Please check website for available dates. Registration several months in advance is recommended.

# COMLEX Level 2-CE and COMLEX Level 2-PE

Online registration and information for Level 2: Comprehensive Osteopathic Medical Licensing Examination (COMLEX 2) is available at www.nbome.org. The deadline for completion of COMLEX Level 2-CE for the Class of 2007 is September 7, 2006 and for the Class of 2008 is August 31, 2007. The deadline for completion of COMLEX Level 2-PE for the Class of 2007 is April 20, 2007 and for the Class of 2008 is December 1, 2007. Please check website for available dates. Registration several months in advance is recommended.

# **COMLEX Level 3**

Online registration and information for Level 3: Comprehensive Osteopathic Medical Licensing Examination (COMLEX 3) is available at <u>www.nbome.org</u>. COMLEX Level 3 is generally taken after the first year of residency is completed. Please check website for available dates. Registration several months in advance is recommended.

Please note that holidays may vary for students on rotation and for members of the faculty and staff.

Examination dates are subject to change with reasonable notice.

# Texas College of Osteopathic Medicine

# COURSE LISTINGS

2006-2007 CATALOG

# Doctor of Osteopathic Medicine Degree Program

# Admissions and Outreach

E-mail: TCOMAdmissions@hsc.unt.edu Phone: 817-735-2204 or 800-535-TCOM Fax: 817-735-2225 Website: <u>www.hsc.unt.edu</u>

Admission into the Texas College of Osteopathic Medicine is selective. Each year, TCOM admits approximately 155 new students from a pool of well-qualified applicants. The Office of Admissions and Outreach, located in Education and Administration Building room 247, provides advising, tours, application processing and other related assistance. TCOM encourages potential applicants to use these services in order to assist them in making informed decisions about pursuing a career in osteopathic medicine.

#### Admission Requirements

To be considered for admission to the DO degree program at the Texas College of Osteopathic Medicine (TCOM), an applicant must meet the minimum academic and test score requirements.

A minimum of three years of college (90 semester hours or the equivalent number of quarter hours) from a re-gionally accredited U.S. college or university is required. Strong preference will be given to applicants who have earned a bachelor's degree before matriculation. The fol-lowing college-level prerequisite course work is required for admission:

- **Biology**: (at least 12 credits of course work and 2 credits of laboratory course work) Includes all Biology courses applied toward a baccalaureate degree in a traditional science field. This includes courses in General Biology, Zoology, Botany, Microbiology, Anatomy and Physiology, Entomology, Pathophysiology, Marine Biology and Herpetology. Courses for non-science or health career majors (Nursing, Pharmacy or Allied Health) are not acceptable towards the prerequisite requirements. Courses in Human Physiology and Anatomy, Cellular and Molecular Biology and Microbiology are highly recommended.
- Chemistry: (a minimum of 6 credit hours work and 2 credits of laboratory course work) These must be courses that are applied toward a baccalaureate degree in any traditional science field. These courses should provide familiarity with analytic and volumetric techniques. Inorganic courses include: General Chemistry, Physical Chemistry and Quantitative Analysis. Courses for non-science or health career majors (Nursing, Pharmacy or Allied Health) are not acceptable towards the prerequisite requirements.

- Organic Chemistry: (a minimum of 6 credit hours work and 2 credits of laboratory course work) These must be courses that are applied toward a baccalaureate degree in any traditional science field. Organic courses must have "Organic" in the course title. Courses for non-science or health related career majors (Nursing, Pharmacy, or Allied Health) are not acceptable towards the prerequisite requirements. Coursework in basic biochemistry can be very helpful in preparing students for medical school.
- **Physics**: (a minimum of 6 credit hours of course work and 2 credits of laboratory course work) This includes all physics courses applied toward a baccalaureate degree in any traditional science field. Courses for nonscience or health career majors (Nursing, Pharmacy or Allied Health) are not acceptable toward the prerequisite requirements.
- **Mathematics**: One semester course of math-based Calculus or Statistics is required. Pre-calculus is not acceptable in meeting this requirement.
- English: (two 3-credit courses) Any course accredited (approved) by the English Department that fulfills the general education English requirement of a baccalaureate degree will meet this requirement. Remedial or developmental courses or "English As a Second Language" courses are not acceptable.
- Foreign Coursework: Applicants must complete at least 90 undergraduate credit hours at a regionally accredited U.S. or Canadian college or university. Transfer credit from a school outside the U.S. or Canada may apply to this requirement only if the individual courses appear on the transcript of an accredited U.S. or Canada col-lege or university - lump sum credit is not allowed. Prescribed pre-medical/pre-dental courses must be taken at an accredited U.S. or Canadian college or Uni-versity. Transfer credit from a school outside the U.S. or Canada will not apply to the prescribed course re-quirement. State law requires that academic work taken at foreign colleges, universities or preparatory schools be excluded from the calculation of the grade point average for students seeking admission to gradu-ate or post-baccalaureate professional school.

#### The Medical College Admissions Test (MCAT)

While any MCAT taken within the past five years will be considered, the Admissions Committee places greater weight on those taken within the past three years. The MCAT is administered nationwide throughout the year.

# To register for the MCAT, visit:

http://www.aamc.org/students/mcat/start.htm

#### Admission Procedures

TCOM requires both a primary and secondary application. Only completed applications are considered for admission. Applicants should carefully read all of the information about the process.

# **Primary Application**

TCOM participates in the Texas Medical and Dental Schools Application Service (TMDSAS) located in Austin, Texas. TMDSAS accepts applications between May 1 and October 15 of the year prior to matriculation. Early applications are strongly encouraged. The primary application can be completed and submitted electronically through the TMDSAS web site at: <u>http://www.utsystem.edu/tmdsas/</u>

The processing of an application may be delayed if either the grades from prerequisite courses or the MCAT scores are not included at the time of application.

Official transcripts from all prior college-level course work and MCAT scores must also be submitted to the application service. In addition, TMDSAS requires that an applicant's premedical/health professions advisory committee submit a written evaluation directly to the service. Letters from two (2) people who are familiar with an applicant may satisfy this requirement if no advisory committee is available. The letters should be from faculty members and/or an advisor who can assess the applicant's suitability for medical school.

For more information, please contact:

Texas Medical and Dental Schools Application Service 702 Colorado, Suite 6.400 Austin, TX 78701 Phone: 512-499-4785 Fax: 512-499-4786

#### http://www.utsystem.edu/tmdsas/

#### Secondary Application

TCOM requires completion of its own web-based secondary application that is completed and submitted electronically through a link on the UNTHSC website at <u>http://</u> <u>www.hsc.unt.edu</u>. There is no additional fee for processing this application.

#### Letter of Evaluation from an Osteopathic Physician

Applicants are also strongly encouraged to submit a letter of evaluation from an osteopathic physician familiar with the applicant (please note - this is recommended but NOT required). The physician may submit this letter of evaluation directly to TCOM if it is not already included in the advisory committee evaluation.

#### Interviews

Only selected applicants will be invited to interview. Interviews are conducted at the University of North Texas Health Science Center located in Fort Worth. Applicants will tour the school, have lunch with current medical students and hear a financial aid presentation. Interviewees may also sit in on medical school classes held that day.

# Applicant Selection

Each year, the Admissions Committee looks for students who demonstrate the greatest promise of becoming skilled osteopathic physicians. Applicants will be evaluated on their personal integrity, compassion, maturity, interpersonal and communication skills, creativity, motivation for and interest in a medical career, the ability to work cooperatively and dedication to service others. These qualities and attributes are evaluated by several means, including letters of evaluation, the scope and nature of extracurricular activities, the breadth of the undergraduate education and personal interviews. All aspects of the entire academic record, including trends in scholastic performance, are examined. Personal experiences, job history (if applicable) and motivation to become an osteopathic physician are considered.

As a state-supported medical school, TCOM is required to admit 90 percent Texas residents for each entering class. Up to 10 percent of each entering class may be filled with non-residents with outstanding credentials. An alien living in the United States under a visa permitting permanent residence or who has filed with proper federal immigration authorities a declaration of intention to become a citizen has the same privilege of qualifying for Texas residency as do citizens of the United States. There is no prejudice for or against any applicant who reapplies for admission. If possi-ble, such applicants are encouraged to identify any defi-ciencies and rectify them before reapplying. Applicants who are not accepted have the opportunity to review their appli-cation with an admissions officer in an effort to identify ways to become more competitive.

#### Admissions Committee Evaluation

Applicants who interview and meet the gualifications for admission are forwarded to the Admissions Committee for evaluation. Committee scores are assigned to each application that is Accepted or placed on an Alternate list to be reviewed again at a later meeting. Be-cause this score affects the ultimate status of the applicant, careful consideration is given to each applicant when assigning a score. The score is derived by assessing both the cognitive and non-cognitive values of the applicant. Committee members will submit an individual score for each applicant at the meeting. The applicant's score is the mean among those members who scored the application. Applicants accepted by the committee will be submitted to the Dean for final approval. Scores range from 1 to 10, with 10 being the highest (Cognitive values: 5 Non-cognitive values: 5). Decimal values may be given. The following variables are assessed when an ap-plicant is scored.

given. The following variables are assessed when an ap-

#### plicant is scored.

Admissions Criteria for D.O. Admissions	
Cognitive Values	Academic performance as an under- graduate student; Academic perform- ance as a graduate student; Academic performance while attending high school; Scores on the Medical College Admission Test (MCAT)
Non- cognitive Values	Interviews scores; Geographic diversity; Socioeconomic background; Commit- ment to the field of study; Availability of members of the osteopathic profession while the applicant attended elementary and secondary school; First generation to go to college; Letters of evaluation; Contributes to the diversity of the class

#### Pre-Match and Match Selection Process

For 2007 admission, TCOM will process applications through new procedures agreed upon by the participating medical schools in the Texas Medical and Dental Schools Application Service (TMDSAS). As part of this new process, some applicants will be able to receive earlier notification than in previous years and they will also be allowed to hold multiple acceptances at the same time.

Interviewed applicants will eventually participate in the February 15, 2007 medical school admissions match. However, some applicants will already know that they have been accepted by at least one medical school. Although these applicants hold an acceptance at one medical school, they may opt to attend another medical school through the match process. A more detailed explanation is below.

#### **Exceptions to the Admissions Process**

There are two exceptions to this new process: Nonresident applicants and D.O./Ph.D. applicants. Applicants who are applying through either of these categories will be notified of our decision beginning October 15 or will continue to be considered on a rolling basis.

#### Application Timeline for 2007 Applications

May 1, 2006	TMDSAS applications will be available online at <u>www.utsystem.edu/tmdsas</u>
June 1, 2006	First day applicants can submit their TMDSAS application
October 15, 2006	Deadline for TMDSAS applications
November 15, 2006- December 31, 2006	Pre-Match Admissions Process: During this period, TCOM will make offers of ad- mission to <u>selected</u> applicants on a rolling basis

	Applicants who have been accepted to more
January 15, 2007	than one of the seven medical schools in the TMDSAS during the Pre-Match Admissions Process, must notify TMDSAS which one school they plan to attend for Fall 2007. NOTE: although applicants may be accepted during the Pre-Match Admissions Process, they may also receive an additional offer through the February 15 medical school ad- missions match (see below).
February 1, 2007	
	Applicants who already hold a seat in a medi- cal school through the Pre-Match Admissions Process may also participate in the Match Ad- missions Process.
February 15, 2007	Match Admissions Process: Applicants will be notfied of their match through the TMDSAS web site, however, official offers can only be made by the medical school. Applcants can only match with one medical school, which will be the highest ranked medical school that ad- mits them.
	Applicants who are matched with a medical school ranked higher than the one school cho- sen through the Pre-Match Admissions Proc- ess, will be withdrawn from the acceptance received during the Pre-Match Admissions Process in favor of the school match on Febru ary 15. By this date, applicants should be ad- mitted into only one of the seven TMDSAS medical schools, however, applicants may also be on the wait list of those schools ranked

# Early Decision Program

Applicants who have outstanding credentials and have a preference for TCOM may apply through the Early Decision Program (EDP), which can greatly reduce the financial costs and psychological burdens of applying to several schools. To apply for the EDP, simply check "yes" for the UNTHSC-TCOM Early Decision Program and "no" for all other schools on the TMDSAS application. The deadline for EDP application is August 1. All EDP decisions are made by October 1. Any applicant that is accepted through the EDP process must attend TCOM. An applicant that is not accepted through the EDP is free to apply to other schools for regular admission consideration.

#### Deferment

Any accepted applicant may request a deferment of entry for one academic year. The applicant must make the request prior to June 1, sign a deferment assurance statement and submit a non-refundable deposit of \$1,000.00 to hold a seat in the next class.

# **Texas Residency**

The rules and regulations for determining residency status are set forth by the Texas Higher Education Coordinating board. In general, students must physically reside in Texas for the 12-month period immediately preceding their initial registration. Residency is based upon the student's status on registration day. Other factors may be considered for residency determination for tuition purposes. Questions regarding these requirements may be referred to the Office of Admissions and Outreach. An alien living in the United States under a visa permitting permanent residence, or one who has filed a declaration of intention to become a citizen with the proper federal authorities, has the same privilege of qualifying for Texas residency status for tuition purposes as does a U.S. citizen.

#### Physical Examination

A physical examination form is sent to each accepted applicant. This form must be completed by the applicant's physician, or, if the applicant chooses, the physical examination may be performed by a physician at TCOM's Central Family Practice Clinic. The only charge for the examination at the TCOM clinic is the cost of laboratory fees.

#### Admission in Advanced Standing (Transfer)

Students enrolled in fully accredited United States medical colleges may be considered for advanced standing admission to the third year of medical studies at, the Texas College of Osteopathic Medicine. Students must demonstrate both the completion and equivalency of a medical school curriculum equivalent to the first two years of medical education at TCOM. The applicant must have valid personal reasons for transfer, have maintained good academic standing, be well qualified in every respect including academic performance, met all other requirements for admission and be eligible for continuation. Admission is competitive and depends upon space availability.

#### Guidelines for Eligibility

- An applicant who has been dismissed from or has with-drawn from another medical college for academic rea-sons will NOT be considered for advanced standing.
- An applicant who had previously applied to TCOM for admission as a first year student and was not accepted will be considered for advanced standing only if aca-demic performance in medical school has been distin-guished as determined by the Admissions Committee.
- An applicant who has taken all premedical or medical studies at foreign institutions, including the medical schools located in the Caribbean region, will NOT be

considered for admission in advanced standing.

• Applicants from related professions, such as dentistry, or those who have completed the related basic sci-ences as a graduate or health professional student are considered for admission only to the first year medical class, regardless of the degree held.

#### Preliminary Requirements

Before any application for admission in advanced stand -ing is processed, an applicant must first submit the following information:

- A letter explaining their reason(s) for requesting admission into the third year;
- Official transcripts of all medical school coursework;
- The dates and outcome of any previous applications to TCOM. Applicants must demonstrate that they have or will have completed the same two-year curricular content as that required of third year medical students at TCOM, including clinical science and osteopathic clinical courses. If any of these requirements are not met, the application will be denied and further processing will be terminated.

#### Requirements

Applicants who meet all preliminary requirements and the stated guidelines for eligibility will be invited to submit all of the following required materials and information for full consideration as an applicant for admission in advanced standing:

- A completed application obtained from the Office of Admissions and Outreach and filing fee of \$100. The deadline for receipt of applications in January 1 of the year of proposed matriculation. All necessary supporting documents must be received by January 15. Incomplete applications will be withdrawn from further consideration. No exceptions will be made.
- Official transcripts from all undergraduate colleges, graduate schools and medical colleges. Official transcripts of the most recent medical school studies completed are needed first. Copies of transcripts are not acceptable.
- A letter of evaluation from the dean of students at the medical school the applicant currently attends. This letter must indicate that the dean of the school has given full approval for the application for transfer.
- Passing scores on all external medical examinations taken (COMLEX, USMLE). Official test results should be sent directly to the Office of Admissions and Outreach from the testing boards. Applicant should indicate when examinations are to be taken if no scores are available.
- A personal statement of reasons for applying for admission in advanced standing. This statement should be addressed to the Admissions Committee.
- A personal interview. Applicants who are under serious consideration are invited to the health science center for personal interviews at the discretion of the Admissions Committee.

The Admissions Committee will consider only applications that are complete in every aspect and that are received on or before January 1.

# Health and Technical Standards

All candidates must meet health and technical standards to be admitted and to participate in the medical education programs of TCOM. Because the doctor of osteopathic medicine (DO) degree signifies that the holder is a physician prepared for entry into the practice of medicine within postgraduate training programs, it follows that the graduates must have the knowledge and skills to function in a broad variety of clinical situations and be able to provide a wide spectrum of patient care.

A candidate for the DO degree must have abilities and skills in five areas: observation; communication; motor; conceptual, integrative and quantitative; and behavioral and social. Reasonable accommodations will be made as required by law; however, the candidate must be able to meet all technical standards with or without reasonable accommodation. The use of a trained intermediary means that a candidate's judgment must be mediated by someone else's power of selection and observation and is not a permissible accommodation.

- Observation: The candidate must be able to observe demonstrations and experiments in the basic sciences including, but not limited to, physiologic and pharmacologic demonstrations in animals, microbiologic cultures and microscopic studies of microorganisms, and tissues in normal and pathologic states. A candidate must be able to observe a patient accurately at a distance and close at hand. Observation requires the functional use of the sense of vision and somatic sensations. It is enhanced by the functional use of the sense of smell.
- Communication: A candidate should be able to speak, hear and observe the patients in order to elicit information; describe changes in mood, activity and posture; and perceive nonverbal communications. A candidate must be able to communicate effectively and sensitively with patients. Communication includes not only speech but also reading and writing. The candidate must be able to communicate effectively and efficiently in verbal and written form with all members of the health care team.
- Motor: Candidates should have sufficient motor function to elicit information from patients by palpation, auscultation, percussion and other diagnostic and therapeutic maneuvers. A candidate should be able to do basic laboratory tests (urinalysis, CBC, etc.), carry out diagnostic procedures (endoscopy, paracentesis, etc.), and read EKGs and X-rays. A candidate should be able to execute motor movements reasonably required to provide general care, osteopathic manipulation and emergency treatment to patients. Examples of emergency treatment reasonably required of physicians are cardiopulmonary resuscitation, the administration of intravenous medication, the application of pressure to stop bleeding, the opening of obstructed airways, the suturing of simple

wounds and the performance of simple obstetrical maneuvers. Such actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the senses of touch and vision.

- Intellectual: conceptual, integrative and quantitative abilities, including measurement, calculations, reasoning, analysis and synthesis. Problem solving, the critical skill demanded of physicians, requires all of these intellectual abilities. In addition, candidates should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures.
- Behavior and Social Attributes: Candidates must have the emotional health required for full use of their intellectual abilities, the exercise of good judgment. the prompt completion of all responsibilities attendant to the diagnosis and care of patients and the development of mature, sensitive and effective relationships with patients. Candidates must be able to tolerate physically taxing workloads and to function effectively under stress. They must be able to adapt to changing environments, display flexibility and learn to function in the face of uncertainties inherent in the clinical problems of many patients. Compassion, integrity, concern for others, interpersonal skills, interest and motivation are all personal gualities that will be assessed during the admission and education processes.

# Curriculum

TCOM's administration and faculty are committed to a curriculum that prepares graduating physicians to increasingly transfer their clinical efforts from:

- therapy to prevention; that is, from remedial medicine to prophylactic medicine.
- late-stage disease to early departure from health; pathologic medicine to physiologic medicine, in order to help patients achieve and continue on their best physiologic path.
- treating disease to teaching healthful living, especially by example.
- intervention in the biologic processes to the search for optimal operation by improving the conditions in which they function.
- a focus on parts of the body to a focus on the total person as the context in which the parts operate.
- the physician to the patient as the source of health and the agent of cure.
- a preoccupation with disease processes to concern about disease origins; that is, from causes of diseases to the factors that permit them to become causes.
- specificity and multiplicity of diseases to susceptibility to illness in general.
- acute, crisis and episodic treatment to long-term treatment.
- addressing acute episodic problems in isolation to dealing with them in the context of the total life and health of the patient.
- an emphasis on depersonalized technology to a heightened awareness of human values and individual

#### uniqueness.

These transfers of emphasis are not an abandonment of one kind of clinical objective for another. In the face of existing and accumulating disease and disablement, it is essential to adequately prepare students for acute, crisis and episodic care, as well as prevention.

The goals of TCOM's educational program are broad, and implementation of these goals in the curriculum is a continual process. Fundamental changes are being made in curriculum design and teaching-learning processes, composition and roles of the faculty, student selection, educational facilities and resources and most important, the attitudes and professional qualifications of TCOM graduates.

#### Semester Credit Hours

One semester credit hour (SCH) is assigned to each 16 hours of scheduled student activity, including examinations. Students receive four semester credit hours for each fourweek rotation.

#### **Course Numbers**

The three or four digits of a course number assist in identifying the type of course, course series and semester in which it is taught.

The first number 7 indicates a required core clinical clerkship rotation; 8, an elective clerkship rotation; and 9, an interdepartmental or other special course. The second digit indicates the semester the course begins, from 1 for the first semester of the first year to 8 for the second semester of the fourth year. The third and/or fourth digits are sequential numbers for course identification.

# Tuition, Fees and Other Charges 2006-2007

Tuition	
Texas Resident:	\$6,550 per academic year
Non-Resident:	\$19,650 per academic year
Estimated expenses for 11 months:	\$35,949 (Texas-resident tuition, fees, for a single first-year student: supplies, room and board, transportation and personal expenses; these expenses vary by year of enrollment.)
Fees	
Designated Tuition:	\$3,600 per academic year
Student Service Fee:	\$354 per academic year
Initial Enrollment Fee	\$80 one time charge for first year students
Course Fees:	Year1: \$2,535; Year 2: \$1,255; Year 3: \$1,056; Year 4: \$328
Medical Service Fee:	\$200 per academic year
Medical Malpractice Fee:	\$200 per academic year
Student Center Fee:	\$30 per academic year
Library Use Fee:	\$150 per academic year
Copy Card Fee:	\$150 per academic year
Activity Center Fee:	\$75 per academic year
Laboratory Fee:	\$25 per academic year for first and second year students
Matriculation Fee:	\$25 for first year students
Graduation Fee:	\$100 for fourth year students
Student Identification Card:	\$25 one time charge
Clinic/Lab Coat Fee:	\$30 one time charge for first year students
Other Charges	
Late Registration Fee:	\$25
Late Tuition Payment Fee:	\$15 per month to be applied as of the first day of the month following each beginning se- mester date
Installment Payment Fee:	\$15
ID Card Replacement Fee:	\$25
Transcript Fee:	\$4 per copy. The first TCOM transcript is free.
Photocopy Fee for Di- ploma:	\$15 per copy
Returned Check Service Charge:	Any check returned to the college must be redeemed by the person writing the check. A service charge of \$25 must be paid.
Special Examinations:	These are based on the charge of the examining body or agency at the time of the exami- nation. These charges include but are not limited to COMLEX 1 and 2, Basic Life Support and Advanced Cardiac Life Saving training. Fees for USMLE 1 and 2 are optional.
Parking Fee (Optional):	\$80 (Replacement permits will be issued at a charge of \$5 if the original is lost, stolen or destroyed.)

Additional information concerning tuition and fees is available in the "Tuition and Fees Register" available at the UNTHSC Student Affairs web site: <u>http://www.hsc.unt.edu/departments/studentaffairs</u>

#### Curriculum Overview

The curriculum at TCOM is presented using an integrated organ systems approach. Basic science topics pertinent to a particular organ system of the body are presented in an integrated fashion. For instance, in a course such as Cardiopulmonary System 1, Gastrointestinal System 1, or Nervous System 1, presentations include the physiology, anatomy, histology, embryology, and introductory pathophysiology of that organ system. In year 2 and dying, patient rights, and other major real life scenarios courses, the pathophysiology, pharmacology, medical microbiology, radiology, surgery, and clinical medicine topics are again integrated into courses focused on major organ systems. Throughout the four-year curriculum, the emphasis is on developing the student as an independent thinker capable of life-long learning. Lectures are de-emphasized in favor of directed student self-study assignments followed by interactive sessions with faculty where the emphasis is on application of learned concepts to case-based clinical problems.

Semesters 1 and 2 courses focus primarily on basic science topics, but also include significant integration with clinical science instruction and are devoted to learning the preclinical sciences in the context of patients' clinical problems. The first 7 weeks address basic knowledge in cell and molecular biology, and biochemistry. Students then move through a sequence of organ system courses, in which the content of the basic sciences is organized around normal human structure, functions and clinical problems affecting each organ system. Towards the end of se- Musculoskeletal and Skin System 1 mester 4 students are introduced to the basic concepts of Nervous System 1 pharmacology. The final two courses of the first year cur- Endocrine System 1 riculum focus on the study of the mechanisms of disease. Clinical Medicine 1 These courses introduce students to the basic principles of Osteopathic Manipulative Medicine 1 pathophysiology, clinical microbiology, and medical immunology. Courses during semesters 3 and 4 focus on pathophysiology and clinical science in each of ten organ systems. Review materials that help students prepare for their board examinations are provided throughout year 2 and a comprehensive review course is provided during the final three weeks of semester four.

Courses devoted to osteopathic manipulative medicine and clinical medicine run in parallel to the systems courses throughout both years 1 and 2 of the curriculum. The Osteopathic Manipulative Medicine courses introduce students to the principles of osteopathic medicine and the di- Osteopathic Manipulative Medicine 2 agnostic and therapeutic applications of manipulative medi- Rural Medicine 2 cine. The aim of the Clinical Medicine courses is to introduce the students to the proper approach to the patient to obtain a thorough history and physical exam. In year 2, students are introduced to the hospital-based, team approach and hone their skills of focused history and physical Respiratory System 2 exam, order writing, interpretation of laboratory data, and Hematopoietic System 2 retrieval of evidence-based information using electronic resources. In addition, students are exposed to actual clinical instruction by participating in hospital rounds, by working alongside community physicians, and by participating in required community service assignments and observing various health-related services in the community, such as Endocrine System 2

hospice-care, emergency medical services, homeless shelters, and blood banking services.

Medical Ethics forms a core element of the Clinical Medicine series in Years 1, 2, and 3. In this series of lectures, small group discussions, and plenary sessions students are asked to critically examine key issues related to awareness of cultural, ethnic, and religious diversity, death that impact the physician-patient relationship.

The last 23 months of the curriculum consist of clerkship rotations and preceptorship assignments. Each student rotates through a series of core clinical clerkships. These clinical rotations are scheduled in TCOM-affiliated teaching hospitals, TCOM clinics and physicians' offices in or near the Fort Worth/Dallas area, or at other affiliated hospitals throughout the state of Texas. The remaining time is spent in elective clerkships. Please note: the length, distribution and sequencing of courses and clerkships are subject to change from what is listed in this catalog. The most current clerkship information is available in the Office of Clinical Affairs. Semester 8 includes a two-week period of oncampus clinical and classroom activities to round out each student's education.

#### Sequence of Courses

Year 1, Semester 1 **Cellular Science** Rural Medicine 1 Medical Informatics

#### Year 1, Semester 2

Cardiopulmonary System 1 Gastrointestinal System 1 Renal System 1 Reproductive System 1 **Fundamentals of Treatment** Mechanisms of Disease 1 Mechanisms of Disease 2 **Clinical Medicine 2** 

#### Year 2, Semester 3

Renal System 2 Cardiovascular System 2 Gastrointestinal System 2 Clinical Medicine 3 Osteopathic Manipulative Medicine 3

Year 2, Semester 4

Reproductive System 2 Nervous System 2 Musculoskeletal and Skin System 2 Fundamentals of Behavioral Science Correlative Basic Science & Clinical Medicine Clinical Medicine 4 Osteopathic Manipulative Medicine 4

#### Year 3, Semesters 5 and 6 Core Clerkships

Clinical Skills (2 weeks) Family Medicine (8 weeks) Internal Medicine (8 weeks) Manipulative Medicine (4 weeks) Obstetrics and Gynecology (6 weeks) Pediatrics (6 weeks) Psychiatry (4 weeks) Surgery (8 weeks) Selective (4 weeks)

#### Year 4, Semester 7

Emergency Medicine (4 weeks) Geriatrics (4 weeks) Primary Care Partnership selective (4 weeks) Subspecialty Internal Medicine (4 weeks) Elective Clerkships (6 X 4 weeks)

#### Year 4, Semester 8 (2 weeks)

Medical Jurisprudence Graduation Preparation & Documentation

# **Course Descriptions**

Phase Directors: Patricia Gwirtz, PhD, Year 1 Michael Oglesby, PhD, Year 2

#### Year 1

#### 9150. Clinical Medicine 1

Thomas Dayberry, PhD, DO, Richard Virgilio, DO, Co-Course Directors: This course is taught longitudinally during semester 1, with integration occurring during the systems courses. The goal of this course is to provide educational experiences that will help the student develop interviewing and physical examination skills. This is taught in a small group lab setting with practical hands-on learning experiences. In addition to this knowledge, the student will be introduced to issues of culture, ethics, faith and community as he/she explores various topics in small group situations. During this course the student is introduced to prevention in clinical practice and will learn appropriate use of medical diagnostic instruments. (4 SCH, Year 1, Semester 1.)

#### 9100. Osteopathic Manipulative Medicine 1

Jerry Dickey, DO, Course Director: This course is an introduction to osteopathic medicine, the osteopathic model, somatic dysfunction, palpation, and direct and indirect treatment methods. (4 SCH, Year 1, Semester 1.)

#### 9191. Rural Medicine 1

This course is the first of four (4) preclinical courses in a special medical school curriculum designed to train future physicians for rural practice. This course is comprised of four (4) components of activities: Classroom Learning Modules, Rural Clinical Correlations, Skills Labs and Clinical Activities. This course is restricted to students enrolled in Rural Osteopathic Medical Education (ROME) track.

#### 9290. Clinical Medicine 2

This course is taught longitudinally during semester 2, with integration occurring during the systems courses. The goal of this course is to provide educational experiences that will help the student develop additional interviewing and physical exam skills. This course builds on the concepts learned in Clinical Medicine 1. Like Clinical Medicine 1, this course is taught in a small group lab setting with emphasis on hands-on-learning experiences. In addition, students will participate in health promotion and ethics small group discussions and observe how community agencies support the health care system. During this course the student will have the opportunity to observe and participate in health care in one of our family practice community preceptor offices. (3 SCH, Year 1, Semester 2. Prerequisite: Clinical Medicine 1)

#### 9200. Osteopathic Manipulative Medicine 2

Jerry Dickey, DO, Course Director: This course covers the diagnosis and treatment of the pelvis, the sacrum and lumbar spine, and the diagnosis of the thoracic and cervical spine. (3 SCH, Year 1, Semester 2.)

#### 9292. Rural Medicine 2

This course is the second of four (4) preclinical courses in a special medical school curriculum designed to train future physicians for rural practice. This course is comprised of four (4) components of activities: Classroom Learning Modules, Rural Clinical Correlations, Skills Labs and Clinical Activities. This course is restricted to students enrolled in Rural Osteopathic Medical Education (ROME) track.

#### System 1 Courses

The overall goal of each of the following system 1 courses is for students to gain the knowledge and skills necessary to understand the normal structure and function of the organ system and selected common and/or important illnesses associated with that organ system. Emphasis is placed on the signs and symptoms of diseases affecting the system and the biological processes with which they are associated.

#### 9110. Cellular Science

Andras Lacko, PhD, Course Director: Students learn to understand the structure and function of the human body's most basic constituents and the role of these components in normal body function and pathological processes. Major elements of the course include key concepts in biochemistry and cell and molecular biology. (9 SCH, Year 1, Semester 1.)

#### 9130. Musculoskeletal and Skin System 1

Harold Sheedlo, PhD, Course Director: (8 SCH, Year 1, Semester 1.)

#### 9140. Nervous System 1

Christopher de Fiebre, PhD, Course Director: (9 SCH, Year 1, Semester 1.)

#### 9260. Endocrine System 1

Robert Wordinger, PhD, Course Director: (2 SCH, Year 1, Semester 1.)

#### 9215. Cardiopulmonary System 1

Michael Smith, PhD, Course Director: (7 SCH, Year 1, Semester 2.)

#### 9240. Gastrointestinal System 1

Patricia Gwirtz, PhD, Course Director: (5SCH, Year 1, Semester 2.)

#### 9250. Renal System 1

Robert Mallet, PhD, Course Director: (2 SCH, Year 1, Semester 2.)

#### 9270. Reproductive System 1

Patricia Gwirtz, PhD, Course Director: (3 SCH, Year 1, Semester 2.)

#### 9310. Fundamentals of Treatment

Michael Martin, PhD, Course Director: (2 SCH, Year 1, Semester 2.)

#### 9280. Mechanisms of Disease 1

Stephen Putthoff, DO, Course Director: (7 SCH, Year 1, Semester 2.)

#### 9285. Mechanisms of Disease 2

Stephen Putthoff, DO, Course Director: (10 SCH, Year 1, Semester 2.)

#### Year 2

#### 9370. Clinical Medicine 3

Thomas Dayberry, PhD, DO, Richard Virgilio, DO, Co-Course Directors: This course is taught longitudinally during semester 3, with integration occurring within each system course. The goal of this course is to provide educational experiences that will help students develop diagnostic reasoning concepts and enhance the interviewing and physical skills learned in earlier clinical medicine courses. Small group sessions involving practical application of knowledge learned are an integral part of this course. In addition, students will participate in health promotion and ethics small group discussions and observe how community agencies support the health care system. During this course students will have the opportunity to participate in the delivery of health care in one of our family practice community preceptor offices. (6 SCH, Year 2, Semester 3. Prerequisite: Clinical Medicine 2)

#### 9300. Osteopathic Manipulative Medicine 3

Russell Gamber, DO, MPH, Course Director: Treatment of the thoracic spine, cervical spine and the OA joint; diagnosis and treatment of the ribs. (4 SCH, Year 2, Semester 3)

#### 9450. Clinical Medicine 4

This course is taught longitudinally during semester 4, with integration occurring within each system course. The goal of this course is to provide educational experiences that will help students develop diagnostic reasoning concepts and enhance the interviewing and physical skills learned in earlier clinical medicine courses. Small group sessions involving practical application of knowledge learned are an integral part of this course. In addition, students will participate in health promotion and ethics small group discussions and observe how community agencies support the health care system. During this course students will have the opportunity to participate in the delivery of health care in one of our family practice community preceptor offices. (7 SCH, Year 2, Semester 4. Prerequisite: Clinical Medicine 3)

#### 9400. Osteopathic Manipulative Medicine 4

Russell Gamber, DO, Course Director: Advanced osteopathic treatment methods. (3 SCH, Year 2, Semester 4.)

#### System 2 Courses

The overall goal of the following system 2 courses is for students to gain the knowledge to understand the pathophysiology of commonly and important clinical problems in each of the organ systems. In addition the basic clinical knowledge and skills necessary for diagnosis and management of common and important diseases and clinical problems is emphasized. The pharmacological approach to treatment is included in each system course.

#### 9380 Renal System 2

Michael Oglesby, PhD, Course Director (5 SCH, Year 2, Semester 3)

#### 9330. Cardiovascular System 2

Frederick Schaller, DO, Clinical Content Consultant; Michael Oglesby, PhD, Administrative Course Director: (6 SCH, Year 2, Semester 3.)

#### 9340. Respiratory System 2

Bruce Dubin, DO, JD, Clinical Content Consultant; Michael Oglesby, PhD, Administrative Course Director: (6 SCH, Year 2, Semester 3.)

#### 9420. Hematopoietic System 2

Linda Cunningham, MD, Course Director: (5 SCH, Year 2, Semester 3.)

#### 9440. Gastrointestinal System 2

Linda Cunningham, MD, Course Director: (4 SCH, Year 2, Semester 3.)

#### 9360. Endocrine System 2

Craig Spellman, DO, PhD, Clinical Content Consultant; Michael Oglesby, PhD., Administrative Course Director: (3 SCH, Year 2, Semester 4.)

#### 9430. Reproductive System 2

Ralph Anderson, M.D., Course Director: (5 SCH, Year 2, Semester 4.)

#### 9410. Nervous System 2

William McIntosh, DO, Clinical Content Consultant; Michael Oglesby, PhD, Administrative Course Director: (6 SCH, Year 2, Semester 4.)

#### 9350. Musculoskeletal and Skin System 2

Raymond Pertusi, DO, Course Director; Michael Oglesby, PhD, Administrative Course Director: (4 SCH, Year 2, Semester 4.)

#### 9370 Fundamentals of Behavioral Science

Alan Podawiltz, DO, Clinical Content Consultant; Michael Oglesby, PhD, Administrative Course Director: (4 SCH, Year 2, Semester 3.) Michael Oglesby, PhD, Administrative Course Director; Alan Podawiltz, DO, Clinical Content Consultant: (4 SCH, Year 2, Semester 3.)

#### 9450. Correlative Basic Science and Clinical Medicine

Steve Fogoros, Course Director: (6 SCH, Year 2, Semester 4.)

# Years 3 & 4

Family Medicine/Primary Care

#### 701. Core Clinical Clerkship in Family Medicine

This course is a required 8-week clinical rotation that must be completed during the third year. Although emphasis is on ambulatory care, students may have the opportunity to follow their assigned patients when inpatient care is required. Students are assigned to faculty family practice clinical practices where they experience continuity of care in family practice. The student is exposed to health care systems (managed care), office management concepts, and practice guidelines with emphasis on clinical application of disease prevention. Weekly small group sessions with selected faculty require students to work as teams to study, discuss and present clinical topics. Emphasis is placed on evidence-based medicine and its application to clinical practice. Rural Track students are assigned to a designated rural community. (8 SCH)

#### 703. Core Clerkship in Emergency Medicine

This is a required four-week rotation in Emergency Medicine. (4 SCH)

#### 714. Core Primary Care Partnership

This course is a four-week clinical clerkship completed during the third or fourth year. The goal of this course is to provide educational experiences within the private sector emphasizing the totality of community-based family practice. This course utilizes community adjunct faculty offices for training sites. (4 SCH)

#### 801. Clinical Clerkship in Family Medicine

This course is a four-week elective that is completed during the fourth year. The goal of this course is to provide educational experiences within the private sector emphasizing the totality of community-based family practice. The student is allowed considerable flexibility in choosing the preceptor for this course. (4 SCH)

#### 803. Clinical Clerkship in Emergency Medicine

An elective four-week rotation in emergency medicine. (4 SCH)

# 805. Clinical Clerkship in Public Health and Preventive Medicine

An elective four-week rotation in public health/preventive medicine. (4 SCH)

#### 806. Clinical Clerkship in Occupational Medicine

An elective four-week rotation in occupational medicine. (4 SCH)

#### 819. Clinical Clerkship in Sports Medicine/ Rehabilitation

An elective four-week rotation in sports medicine and rehabilitation emphasizing the role of the primary care physician in the care of athletes. (4 SCH)

# 838. Clinical Clerkship in Physical Medicine and Rehabilitation

An elective four-week rotation in sports medicine and physical therapy clinics emphasizing the principles of rehabilitation of musculoskeletal, neurologic and orthopedic conditions. (4 SCH)

#### 725. Core Geriatric Medicine

A required four-week clerkship in geriatric medicine designed to provide the foundation for competent, compassionate care of the older patient. (4 SCH)

#### Internal Medicine

#### 704. Core Clinical required Clerkships in Internal Medicine

The clerkship is an eight-week program divided into two four-week sessions. One session is served in the general internal medicine ward service. Under rigorous audit, the clerk is responsible for the care of hospitalized patients. This care includes collection of data from initial evaluation to final disposition. An emphasis is placed on the skills of problem solving (data collection), management, planning and proper record keeping (criteria of evaluations) using thoroughness, reliability, efficiency and logic. Manual skills are learned and reinforced. The second four-week session is an ambulatory internal medicine rotation. The clerk is exposed to the multiple aspects of outpatient and ambulatory medicine including, but not limited to, rheumatology, neurology, diabetes management, general internal medicine, geriatrics (extended-care facility visits), public health, outpatient hemodialysis and outpatient endoscopy. This

#### DOCTOR OF OSTEOPATHIC MEDICINE

session also includes case presentations and lectures on specific topics. Off-campus clerkships are served at affiliated hospitals and are generally based on the classic preceptor/clerkship format. The clerk spends eight weeks in a combined ambulatory and hospital-based program that has responsibilities and goals similar to the on-campus program. (4 SCH each session)

#### 706. Core Clinical Clerkship in Subspecialty Internal Medicine

A required four-week clerkship in subspecialty internal medicine, including one of the following: pulmonary medicine, gastroenterology, cardiology or rheumatology. The site. With the concurrence of the hospital and appropriate clerk solves problems of actual patients using the datagathering and processing methods learned in the core any of the following: anesthesiology, dermatology, patholmedicine clerkship. Physiologic, biochemical and anatomic ogy or radiology. (4 SCH) principles are re-examined within the framework of problem solving. (4 SCH)

#### 711. Core Primary Care Partnership

A four-week clinical clerkship completed during the fourth year. The goal of this course is to provide educational experiences within the private sector that emphasize the totality of a community-based internal medicine practice. (4 SCH)

#### 804. Clinical Clerkship in Internal Medicine

An elective four-week rotation in internal medicine. (4 SCH)

#### 812. Clinical Clerkship in Dermatology

An elective four-week rotation in dermatology. (4 SCH)

#### 821. Clinical Clerkship in Rheumatology

An elective four-week rotation in rheumatology. (4 SCH)

#### 822. Clinical Clerkship in Cardiology

An elective four-week rotation in cardiology. (4 SCH)

#### 823. Clinical Clerkship in Endocrinology

An elective four-week rotation in endocrinology. (4 SCH)

#### 824. Clinical Clerkship in Gastroenterology

An elective four-week rotation in gastroenterology. (4 SCH)

#### 825. Clinical Clerkship in Geriatrics

An elective four-week rotation in geriatrics. (4 SCH)

#### 826. Clinical Clerkship in Hematology/Oncology

An elective four-week rotation in hematology/oncology. (4 SCH)

#### 827. Clinical Clerkship in Infectious Disease

An elective four-week rotation in infectious disease. (4 SCH)

#### 828. Clinical Clerkship in Nephrology

An elective four-week rotation in nephrology. (4 SCH)

#### 829. Clinical Clerkship in Neurology

An elective four-week rotation in neurology. (4 SCH)

#### 830. Clinical Clerkship in Pulmonary Medicine

An elective four-week rotation in pulmonary medicine. (4 SCH)

840. Clinical Clerkship in Hyperbaric Medicine

An elective four-week rotation in hyperbaric medicine. (4 SCH)

#### 842. Clinical Clerkship in Hospital Medicine

An elective four-week rotation consisting of two two-week rotations to be taken consecutively at the same hospital health science center approval, the rotation could consist of

#### Manipulative Medicine

#### 715. Core Clerkship in Manipulative Medicine

A required four-week rotation in the Department of Manipulative Medicine. The rotation includes an intensive didactic and hands-on review of Osteopathic Manipulative Medicine. Students see and treat their own patients in a facultysupervised clinic and accompany faculty members during clinic hours. Students also participate in weekly literature discussions and case reviews. Students are responsible for an end-of-rotation written examination and a written case report. (4 SCH).

#### 712. Core Primary Care Partnership

A four-week clinical clerkship completed during the fourth year. The goal of this course is to provide educational experiences within the private sector that emphasize the totality of a community-based manipulative medicine practice. (4 SCH)

#### 815. Clinical Clerkship in Manipulative Medicine

An elective four-week rotation in manipulative medicine. (4 SCH)

#### Undergraduate Teaching and Research Fellowships

Students are selected each year to serve fellowships with the Department of Manipulative Medicine. The students' last two years of study are expanded to three to allow time for research, teaching and clinical service in the department. The following courses are required for these fellowship programs:

#### 901. Medical Education

A required course held in an independent study format that prepares osteopathic physicians for an academic career in osteopathic manipulative medicine. (Section A, Research Track, 4 SCH; Section B, Teaching Track, 12 SCH)

#### 902. Clinical Field Studies

A required advanced program that prepares future physicians for clinical practice in osteopathic manipulative medicine. (12 SCH)

#### 903. Advanced Clinical Clerkship

A required course that develops physicians to become instructors in the area of the clinical application of advanced osteopathic manipulative techniques and concepts. (8) SCH)

#### 904. Research/Special Topics

A required course that teaches future osteopathic physicians about current research topics and opportunities in the field of osteopathic manipulative medicine. Students are expected to prepare an original research paper suitable for publication. (Section A, Research Track, 16 SCH; Section B. Teaching Track. 8 SCH)

#### 905. Seminar

A required course that teaches future physicians about the varied topics and techniques in osteopathic manipulative medicine with emphasis on osteopathic philosophy and clinical case management. (8 SCH)

#### 906. Health Administration and Education

A required course that provides the competencies necessary for a career in medical administration. (4 SCH)

#### Education

#### 700. Core Clerkship in Clinical Skills

A required three-week rotation emphasizing preparation in clinical skills. (3 SCH)

#### 813. Clinical Clerkship in Medical Humanities

An elective four-week rotation in medical humanities. (4 SCH)

#### 900. Clinical Clerkship in Academic Medicine

An elective four-week directed study in Academic Medicine designed for the acquisition of test construction skills and for the review of essential concepts in the clinical sciences, prior to COMLEX II. (4 SCH)

#### 9001. Literature and Medicine

Elective seminar series for medical students about the values from literature that enhance sensitivity to patients and encourages self-reflection on physician roles in health care.

#### Psychiatry

#### 709. Core Clinical Clerkship in Psychiatry

A required four-week rotation in psychiatry that serves as ity of a community-based pediatric medicine practice. (4 the clinical phase of the graduated curriculum in psychiatry and human behavior. Students will perform evaluations, develop diagnostic paradigms, develop treatment plans, provide supportive psychotherapy and summarize their An elective four-week rotation in pediatrics. (4 SCH) findings under the supervision of both regular and affiliated faculty members. (4 SCH)

#### 809. Clinical Clerkship in Psychiatry

An elective four-week rotation in psychiatry that can be tailored to meet the student's objectives. This is especially useful to students who want to pursue advanced training in psychiatry. (4 SCH)

#### Obstetrics and Gynecology

#### 707. Core Clinical Clerkship in Obstetrics and Gynecoloqv

The core clerkship in OB/GYN consists of six weeks of combined outpatient and hospital experience exposing the clerk to ambulatory prenatal care and gynecology. The hospital portion of the rotation consists of labor and delivery and gynecological surgery. The experience focuses on the primary care of women in the reproductive and menopausal years. (6 SCH)

#### 807. Clinical Clerkship in Obstetrics and Gynecology

An elective four-week rotation in obstetrics and gynecology. (4 SCH)

#### Pathology

#### 817. Clinical Clerkship in Autopsy Pathology

An elective four-week rotation in pathology and forensic medicine. This occurs at the Tarrant County Medical Examiner's Office and emphasizes toxicology, medical investigation, scene evaluation and forensic necropsy. All rotation approvals are at the discretion of the department chair. (4 SCH)

#### 842. Clinical Clerkship in Hospital Medicine

An elective four-week rotation consisting of two two-week rotations to be taken consecutively at the same hospital site. With the concurrence of the hospital and appropriate health science center approval, the rotation could consist of any of the following: anesthesiology, dermatology, pathology or radiology. (4 SCH)

#### Pediatrics

#### 708. Core Clinical Clerkship in Pediatrics

A required six-week rotation in pediatrics, both general and specialty pediatrics, that addresses issues regarding the recognition and treatment of common health problems of infants, children and adolescents. Ambulatory clinics, nursery and hospital ward service are included. This rotation will form a foundation for those students who elect to further their study in pediatrics. (6 SCH)

#### 713. Core Primary Care Partnership

A four-week clinical clerkship completed during the fourth year. The goal of this course is to provide educational experiences within the private sector that emphasize the total-SCH)

#### 808. Clinical Clerkship in Pediatrics

#### Radiology

818. Clinical Clerkship in Radiology

An elective four-week rotation in radiology. (4 SCH)

#### 842. Clinical Clerkship in Hospital Medicine

An elective four-week rotation consisting of two two-week rotations to be taken consecutively at the same hospital site. With the concurrence of the hospital and appropriate health science center approval, the rotation could consist of any of the following: anesthesiology, dermatology, pathology or radiology. (4 SCH)

#### Surgery

#### 710. Core Clinical Clerkship in Surgery

A required eight-week clerkship in surgery in an affiliated hospital. Students spend time in the various surgical specialties. (8 SCH)

#### 810. Clinical Clerkship in Surgery

An elective four-week clerkship in surgery in an affiliated hospital. (4 SCH)

#### 811. Clinical Clerkship in Anesthesiology

An elective four-week rotation in anesthesiology. (4 SCH)

#### 814. Clinical Clerkship in Ophthalmology

An elective four-week clerkship in ophthalmology. (4 SCH)

#### 816. Clinical Clerkship in Otorhinolaryngology

An elective four-week rotation in otorhinolaryngology. (4 SCH)

#### 832. Clinical Clerkship in Orthopedics

An elective four-week rotation in orthopedics. (4 SCH)

#### 833. Clinical Clerkship in Thoracic Surgery

An elective four-week rotation in thoracic surgery. (4 SCH)

#### 834. Clinical Clerkship in Neurosurgery

An elective four-week rotation in neurosurgery. (4 SCH)

#### 835. Clinical Clerkship in Urology

An elective four-week rotation in urology. (4 SCH)

#### 842. Clinical Clerkship in Hospital Medicine

An elective four-week rotation consisting of two two-week rotations to be taken consecutively at the same hospital site. With the concurrence of the hospital and appropriate health science center approval, the rotation could consist of any of the following: anesthesiology, dermatology, pathology and radiology. (4 SCH)

# Academic Policies

Each student enrolled at UNT Health Science Center is individually responsible for knowing current academic and administrative policies and the procedures and operational policies that apply to enrollment in his or her chosen degree program. This section of the catalog provides selected academic and administrative policies governing the Doctor of Osteopathic Medicine degree program. Other general policies are stated elsewhere in this catalog. Academic policies and guidance also are presented in other official health science center documents and specific program publications.

The health science center reserves the right to amend or add to the academic policies and scholastic regulations at any time during the enrollment period. Such changes or additions are intended to improve the quality of education and are introduced in a fair and deliberate manner with timely notice provided to all students affected by the changes.

#### Registration

Registration is conducted annually during the summer for first-, second-, third-, and fourth-year TCOM students. Registration consists of paying tuition and fees and completing registration forms for the Office of the Registrar, Financial Aid Office and Office of Student Affairs.

Students may register for and attend only those courses and clinical rotations listed on their official academic schedules of classes, as approved by the dean of TCOM. Students may not be enrolled in two or more courses meeting at the same time.

Only students properly enrolled by the registrar may attend classes. Any examinations or other materials completed by an individual who is not officially enrolled will be destroyed. No record will be kept of examinations or other academic work done by individuals whose enrollment in a course has not been authorized by the registrar. Examinations or other course materials completed by a dismissed student who is attending classes while under an official appeal will not be scored and will be retained by the registrar pending outcome of the appeal.

Late fees are assessed for each day following the designated date of registration. A check returned because of insufficient funds will incur a penalty and also may result in a charge for late registration. (See Fiscal Policies for more information.)

# Attendance

During Years 1 and 2, medical students are expected to attend all lectures. Attendance is required at all laboratories and integrative and clinical experiences. Limited excused absences may be granted with permission of the assistant or associate dean for academic affairs. The student is responsible for obtaining and learning subject materials presented during an absence. When the period of absence is known and may be planned, the student must confer with the appropriate course director and determine a plan of action for the absence. The student must then submit a completed excused absence request form at least two weeks before the requested date(s) of absence to the Of-

fice of Academic Affairs.

Throughout Years 3 and 4, because of the responsibility for patient care, as well as the expectations of clinical assignments, 100 percent attendance is required on all clinical clerkships.

However, it is recognized that situations beyond a student's control may arise that require absence from a clerkship. When approved by the clerkship director, a student may be absent at the rate of one-day absence per two weeks on a clerkship. These approved absences should be limited to instances such as: internship/residency interviews, personal and/or immediate family illness, physician appointment, or the death of a family member.

All absences require written documentation using the Request for Absence From Clerkship Form available through the Office of Clinical Education.

Unapproved absences or absences in excess of this policy will, at the discretion of the course director and/or clinical department, either require remediation of the time missed or result in the loss of points from the final clerkship grade.

Absences in excess of five days on a four-week clerkship, or seven days on a six-week clerkship, will result in a grade of "incomplete," and will require that the clerkship be repeated in its entirety.

Absence(s) without notification of the clinic and/or clerkship director (i.e., failure to report) will be considered neglect of duty and may result in a failing grade for the clerkship.

Students may receive approved absences for certain health science center-related activities. These absences require advance written approval from the associate vice president for student affairs, and are subject to the above provisions for four- and six-week clerkships. Any exception to this policy may be made only with the approval of the assistant or associate dean for academic affairs.

# Holidays and Religious Observances

Students on clinical rotation are expected to be available during all holidays, with the exception of Thanksgiving Day, the day after Thanksgiving, and December 25 through January 1. These are the only school-approved holidays for Year 3 and Year 4 students. Please consult the official academic calendar for complete information.

For Semesters 1-4, a student may request release from duties for observance of a religious holy day by submitting a Religious Holy Day Request Form to the associate vice president for student affairs. Instructors may require a letter of verification of any observed holy days from a religious institution. The Religious Holy Day Request Form is available in the Office of Academic Affairs. Refer to Section 51.911 of the Texas Education Code to see applicable guidelines for this policy.

# Leave of Absence

A student may request or be required to take a leave of absence with the occurrence of a medical problem, substantial personal problem or as recommended by the Student Performance Committee. Students requesting a leave of absence must apply to the dean of TCOM. In the event a letter from the treating physician or a licensed profes- approval of the dean of TCOM. sional describing the nature of the disability for which the leave is requested and the estimated length of time needed which there are unpaid tuition and fees will be made availfor recovery.

After consultation with the student, the dean of TCOM will decide whether or not the leave will be granted and the grades (as well as any transcript) will not be released until conditions under which the student may return to school. appropriate payment is received by the health science cen-Students must report to the Office of Student Affairs to obtain a Leave of Absence Form and complete it before they are officially placed on an approved leave.

Before a student may be readmitted, a written request for readmission must be submitted by the student to the dean of TCOM. In the case of a medical leave, a letter from the treating physician or a licensed professional must accompany the readmission request stating that the student has recovered from the disability for which the medical leave was granted and is able to participate in a full academic program.

# Grading **Course Syllabus**

The course syllabus contains specific educational requirements – assignments, evaluations, grading and other conditions of performance - that must be satisfactorily completed in order to receive a passing grade. Modifications to the requirements and procedures of a course may be made when judged necessary to improve instruction or to conform to the scholastic regulations of the college.

# Numerical Course Grades

The grading standard for all TCOM courses will be a numerical system ranging from 0 to 100, with 70 as the lowest passing grade. A grade of 69 or less is defined as a failing grade. Numerical course grades will be rounded off to the nearest whole number (for example, 69.1 to 69.4 will be recorded as a 69; 69.5 to 69.9 will be recorded as a 70).

For purposes of promotion and graduation, a cumulative weighted average of 70 or better is required. The weighted average for a block or semester is determined by dividing the total number of grade points earned by the total number of hours attempted, excluding courses in which a "CR" grade is achieved.

# Grade Symbols and Designations

W: Withdrawal in good academic standing, or Withdrawal, not in good academic standing. WP: Withdrawal passing. WF: Withdrawal failing. NC: No credit. CR: Credit. I: Incomplete. AUD: Audit. IP: In Progress.

# Recording Grades

No grade will be removed or deleted from a student's official permanent record once properly recorded, except in the case of inaccurate recording. It is assumed that faculty members exercise their best judgment in formulating grades. Changes are not permitted after grades have been filed with the registrar, except to correct clerical errors. A request for error correction must be initiated within 30 days after the close of the semester or term for which the grade

of a medical problem, the request must be accompanied by was awarded. Requests for correction after 30 days require

Grades assigned during a period of instruction for able by the registrar for official college purposes, such as the review of academic performance. However, those ter.

#### Incomplete Grades

A grade of "I" (Incomplete) will be assigned only when a student has not completed all academic requirements and assignments, including regular examinations, due to documented illness or circumstances beyond a student's control. A student may not advance to the next academic year until all failures and incomplete ("I") grades are remedied. A student will not be promoted to clinical rotations with an incomplete grade without prior approval of the dean of TCOM. A grade of "I" will be recorded for any student who does not complete required course evaluations within the prescribed time limit.

#### Semester Grades

Grades are reported to the Office of the Registrar within five working days of the conclusion of a course. Grades are posted on the website as soon as officially posted by the Course Director. The semester grade report includes grades for the present academic term as well as the cumulative weighted average earned throughout the academic program. Grades will not be released over the telephone and will be kept in confidence. Students who fail an examination are required to consult with the course director within five working days following notification of the failed examination.

# Remedied Grades

A student who receives a failing grade (69.4 or less) in a course will have to repeat that course in accordance with the promotion requirements and achieve either a grade of 70 or a "CR." Failure to achieve either a grade of 70 or better or a "CR" in a remedied or repeated course is grounds for dismissal.

When a course is repeated or remedied, all attempted credit hours and earned grade points are counted in computing the cumulative weighted average. An asterisk is placed next to these courses to indicate that the course has been repeated. Entries for the repeated course and the remedied grade are shown elsewhere on the transcript.

# Course/Instructor Evaluation

Each student is responsible for providing constructive evaluation of each course, clinical rotation and instructor in the curriculum. Year 1 and Year 2 course evaluations must be completed within five business days after each course ends. Evaluations for all clinical rotations must be completed within 30 calendar days following the end of the rotation. If this responsibility is not met for a given course, the grade for that course will be withheld until the evaluation is completed. All evaluations must be current before a student can register for the next semester. For clinical year stu- quest the privilege of a special academic program. Redents, no transcript will be released until course evalua- quests to be considered for a special academic program tions are up to date. For complete information, see policy will be directed to the dean of TCOM, who will act upon the number S/TCOM/Acad-36, Administrative Policy – Student request after consultation with the appropriate educational Evaluation of Courses and Instructors.

#### Academic Honors

It is a tradition at the health science center to recognize its highest scholars and promote academic excellence. Honors for medical students are determined at the end of the academic year at graduation. Academic honors are noted on the student's official permanent record.

The Dean's List for semesters 1 through 4 recognizes medical students whose weighted averages are 90 percent or greater and who make up the highest 10 percent of each class enrolled in the college. The distinction of President's Scholar is awarded to graduating seniors who have been named to the Dean's List for every semester of enrollment in TCOM.

Academic honors are awarded with the degree at graduation to medical students whose cumulative weighted average is 90 percent or greater and who make up the highest 10 percent of the graduating class. The students in this group shall be designated as graduating with honors. For the purpose of determining academic honors for graduation, grades will be calculated for honors at the beginning of the eighth semester. In no case will grades for honors be considered after this date.

No graduate will be named to the Dean's List or receive a degree with honors who has failed a course, who has not been enrolled as a full-time student, or who has been placed on academic, disciplinary probation or suspension.

# Advanced Placement/Waivers

Requests for advanced placement or waiver for any course must be declared by the medical student on the first day of enrollment at the health science center. The student must then present all supporting documents to the Office of the Registrar. The student is required to attend all classes and take all examinations until a decision is made regarding the advanced placement request.

To be placed in advanced standing, a student must have taken a course judged to be equivalent by the appropriate academic department or course director within two years before the first day of classes and awarded a minimum grade of "B," or have completed a similar course and obtained a minimum grade of "B" in a written comprehensive examination given by the department or course director for this purpose before the student's program begins at of the spring semester. Students may obtain copies of their the health science center.

The decision regarding a request for advanced standing will be transmitted in writing to the student by the dean of TCOM, who will also notify the registrar and the appropriate department or course director. Courses for which advanced standing is granted are assigned a transcript designation of "CR" and are not calculated in the cumulative weighted average.

# Special Academic Programs

Under extenuating circumstances, a student may re-

program, the Student Performance Committee and the Office of Student Affairs. There is no assurance that requests will be granted. Guidelines for a special program are as follows:

Requests for a special program must be made three weeks before enrollment in the fall semester of the first year or within three weeks before the beginning of the first semester of each year of classes.

No request will be considered at any other time in the year unless there is documented evidence of a medical or serious personal problem that would prevent the student from completing the year with a full course load. Under no circumstances will special programs be granted to students only for the reason of poor academic standing, or to students who have not applied themselves in studies at TCOM, including class attendance.

Furthermore, the student should have indicated by efforts at the college that he or she has the characteristics to be successful in the medical school curriculum. Any student (other than a transfer student) granted a special program will be placed on a standard five-year program. All of the academic and non-academic requirements of the college will apply to any student on a special program, and the student must meet the requirements for the class that he or she will graduate with.

The dean of TCOM may make exceptions to these reguirements if it is determined that an extraordinary circumstance exists to warrant such an exception.

# Auditing

Students may audit classes if they have obtained permission from the dean of TCOM and have paid all tuition and fees. These students will be expected to meet the requirements of all classes and take examinations unless prior arrangements have been made with the course director and/or department chair or phase director.

No grades will be given for audited classes, but these courses will be shown on the academic transcript.

# Transcripts and Ranking

The term "academic transcript" refers to a copy of the official permanent record of a student's approved academic course work, including academic marks, scholarships and degrees. Class ranks are posted on the website at the end transcripts by submitting written requests to the Office of the Registrar. The first copy of a TCOM transcript is free. A \$4 fee is charged thereafter for each official transcript. A \$1 fee is charged for each copy of an undergraduate transcript in a student's file. Alteration of academic records or transcripts with the intent to use such a document fraudulently is a crime punishable by law. The penalty is a fine of not more than \$1,000 and/or confinement in the county jail for a period not to exceed one year. Appropriate payment of tuition and fees must be made before a transcript is released.

# Examinations Administration

Examinations are administered at the time and date established by the course director and/or published in the course syllabus. They begin and end as scheduled and all answers must be recorded in the manner prescribed by the course director. No examinations will be distributed after the first student has turned in a completed examination. All written examinations will be scheduled in Luibel Hall as the first activity of the day. All other exams (i.e. practical and lab) will be scheduled as the first activity of the day when possible. For complete information, see Policy No. S/ TCOM/ Exams-01 in the Academic Policy Manual available in the Office of Academic Affairs.

# Secure Testing Policy

Test questions and keys used in written examinations that contribute to a course grade will not be retained by students. Following major written examinations, students may attend a post-exam review session to receive feedback on their examination performance. The intent of this policy is to facilitate the long-term development of a collection (bank) of questions with increasing number and quality that will permit improved assessment of students' knowledge and skills. For complete information, see Policy No. F/TCOM/ CurrMgmt-09 in the Academic Policy Manual available in each academic department and in the Office of Academic Affairs.

# Final Examinations

No student may be exempt from sitting for final examinations at their scheduled time. In the case of unusual circumstances, the student may petition the course director. Each case of this type will be considered on its individual merits.

# Make-Up Examinations

A make-up examination is defined as an examination administered to a student in lieu of a regular course examination when the student has (1) arranged in advance to take an examination early or late or (2) missed taking a regularly scheduled examination. Make-up examinations are given only in the case of an approved absence or a documented medical excuse.

Approval is required from the course director to authorize a make-up examination. If a makeup exam is not authorized by the course director, the student may appeal to the phase director. The phase director will meet with the assistant or associate dean for academic affairs and the course director to consider the appeal and render a decision to the student. The final decision on any appeal for a request for a makeup examination will be made by the Associate Dean for Academic Affairs.

A student who misses a scheduled examination without receiving approval by the Associate Dean for Academic Affairs, phase director, and the course director, either to take an early or late examination or to make up a missed examination, will receive a grade of zero for that examination.

A student who misses an examination is not permitted to participate in a post-exam review of that examination if they have not completed the make-up examination by the time the post-exam review takes place.

# Procedure: Early/Late Examination

To request an early or late make-up examination, a student must obtain and complete an excused absence form requesting a make-up examination from the course director. In the case of an early examination, the completed form must be submitted to the course director at least five (5) days before the date of the exam. This form documents the reason for the absence and the date the student requested the make-up examination. A copy of the completed and signed request is sent to the phase director and forwarded to the Office of the Registrar.

# Procedure: Making Up a Missed Examination

Within five business days after the missed examination, a student obtains and fills out an excused absence form requesting a make-up examination from the course director. If approved, a make-up examination must be administered within seven (7) days following the date of the approval, except when the course director determines that additional time is needed to arrange a laboratory or clinical practical exam.

# Failed Examinations

Any student who fails an examination will be required to contact the course director within five (5) class days following notification of the failed examination in order to arrange for academic counseling and remediation. At the time of the meeting, an Academic Consultation Report must be completed indicating the remediation plan agreed to by the course director and the student. A copy of the completed Academic Consultation Report must be filed in the administrative offices of the Division of Student Affairs.

# External Examinations

It is the policy of Texas College of Osteopathic Medicine to promote measures that will ensure the security of testing materials from external examinations. To ensure the security of testing materials from external examinations, TCOM may require all of its medical students to sign a document whereby each student:

Acknowledges awareness that external testing materials are owned and copyrighted by outside entities and that any form of copying these materials is prohibited.

■ Acknowledges that they will not reproduce and distribute external testing materials that are owned and copyrighted by outside entities.

Acknowledges that they will not distribute any external testing materials to students at other medical schools or to any other persons.

The college may take any other reasonable action to ensure the security of testing materials from external examinations.

# Subject Exam and Comprehensive Exam Policy

# Subject Examinations

Subject Examinations from the National Board of Medical Examiners (NBME) will be administered in core clinical clerkships for which these examinations are available. Assigned students must sit for the appropriate subject examination administered at the completion of each of their rotations. Any student who is unable to sit for the subject examination at the scheduled time is referred to the course director for an excused absence and reassignment of test date. Core clerkship subject examinations must be taken within 60 days of the original scheduled date. The National Board of Osteopathic Medical Examiners (NBOME) subject exam for Osteopathic Principles and Practice will be administered a the end of the core rotation in Manipulative Medicine.

All students are required to take the subject examinations without prior determination that the course has been passed. Core Clerkship Subject Examinations will be graded and a scaled score based on national performance data will be used to determine 25% of the clerkship grade.

# National Board Examinations

All medical students are required to take Level I of the tion. Comprehensive Osteopathic Medical Licensing Examination (COMLEX), the examination administered by the National Board of Osteopathic Medical Examiners (NBOME), upon completion of the second year of the medical curriculum. To be eligible, a student must have be currently in "good academic standing" at the time of registration for the COMLEX Level I exam.

All students are required to pass Level I (per the minimums established by the National Board of Osteopathic Medical Examiners) for promotion to the third year. Students who do not pass Level I will be required to retake the examination at the regularly scheduled examination period in the fall of the third year. The students will be allowed to continue in the third year classification on a provisional basis pending results of the second examination. Medical students must pass COMLEX Level I to continue in clinical clerkship rotations.

Students may audit appropriate basic science courses in order to prepare for re-examination with the approval of the dean of TCOM, phase director and course director. A student who does not achieve a satisfactory result on the second examination will be dismissed from the University of North Texas Health Science Center.

All students are required to take Level II of COMLEX in the summer of Year 4. A student is required to pass Level II (per the minimums established by NBOME) for graduation. Students who do not pass Level II will have a second opportunity to take the test during the spring of their fourth year. Students who are unsuccessful on the second try will be dismissed from the University of North Texas Health Science Center.

Students must apply to the dean of TCOM in writing to request approval to not take the COMLEX Level II fall examination. Permission will be granted only for documented extraordinary circumstances. All students are required to take the COMLEX-USA Level II-PE. Beginning with the Class of 2008, the COMLEX 2-PE examination must be passed to graduate. Performance Evaluation Component prior to graduation.

# Physician Licensure

Physician licensing is the prerogative of individual states. In Texas, the Texas State Board of Medical Examiners (TSBME) currently grants licensure based upon factors including the applicant successfully passing the COMLEX Levels I, II and III, or the United States Medical Licensing Examination Steps 1, 2 and 3, plus the Medical Jurisprudence Examination.

COMLEX Levels I, II and III are administered at private testing centers located throughout the state. In Texas, the Medical Jurisprudence examination is administered only in Austin. Information on dates and fees are available in the Office of the Registrar, along with registration forms. Information on the licensing requirements of other states may be found in the annual almanac issued as a supplement to the Journal of the American Osteopathic Association, or by writing to the state's medical licensing board.

The health science center does not require that students take the United States Medical Licensing Examina-

# Licensing Examination Review

All medical students will be required to complete a licensing examination review, which will be conducted during the spring of the second year. This review is intended to assist students in preparing for licensing examinations.

# Promotion and Probation

Normal progression through the curriculum requires that a student achieve a cumulative average of at least 70 (or credit) in each academic year and that there be no failing grades (below 70 or no credit) that have not been corrected. Achievement of this standard in each academic year is required for promotion to the next academic year. It must also be met before a Year 3 student will be allowed to begin clinical rotations, and the same standard must be met in the fourth year in order to graduate. In addition, the graduating student must have passed Levels I, II, and II PE of the Comprehensive Osteopathic Medical Licensing Examination administered by the National Board of Osteopathic Medical Examiners.

The academic standards for successful completion of each course or clinical rotation are determined by the department or interdisciplinary unit in which the course or rotation is administered. The student has the primary responsibility for acquiring knowledge and clinical proficiency and for meeting the academic standards set for each course or program. The health science center in no way guarantees that any student will achieve academic or professional accomplishment.

Students must meet the minimum standards and reguirements set by the institution in order to remain in good academic standing. Students will be placed on academic probation if they have a cumulative weighted average of

less than 70 or if a failing grade is received in any course. from the faculty during the regular offering of the course. Students on academic probation must achieve a passing Remediation is a privilege that must be earned by the stuarade on all deficient course work during that academic dent. year. They will be removed from academic probation only after successfully correcting their particular deficiency. A ing to pass the course or rotation by adhering to the attenstudent who does not remedy a failed grade(s) within the dance policy of the course or rotation, attending help sesacademic year will be subject to dismissal.

Academic standing is reviewed by the Student Performance Committee periodically throughout the year and includes consideration of a student's overall performance at following schedule: the health science center during any and all periods of en- . rollment. Academic probation or other actions may be recommended for students who have an incomplete course grade. In addition, students may be placed on academic . probation for ethical, professional and personal standards that fall below those established by the health science cen- . ter. Students who meet any of the above criteria will be required to appear before the Student Performance Committee when notified by the Registrar's Office.

promotion, for beginning clinical rotation or for graduation ure to earn at least a grade of 70 or better or "CR" in a may be given an opportunity to correct their deficiencies remedied course is grounds for dismissal from the health either at specified times during the academic year or by science center. adding an additional period of time to their medical education.

The Student Performance Committee will recommend to the dean of TCOM that students should be offered an opportunity to correct their deficiencies during the summer or during the next academic year or that they be dismissed. Students will be notified of the committee's decision in writing by the dean of TCOM. It is recognized by the Student load: Year 1 or Year 2 students who have failing grades Performance Committee that each student's situation may correct deficiencies during the summer prior to either should be evaluated as an individual case.

# Academic Probation

Academic probation is a serious matter and serves as official notice to the student that the quality of the student's complished under one of two conditions: performance during the probationary period must improve . in order to remain eligible to continue at the health science center. Any student who fails to improve his or her performance in the areas identified by the Student Performance Committee during the probationary period may be contin- . ued on probation, asked to withdraw or be dismissed from the health science center. Students on academic probation may not hold any elected or appointed office, institutional or external.

Students experiencing academic difficulty or on academic probation are expected to take full advantage of their educational experience by regularly attending classes and seeking assistance from faculty, course directors and the . Division of Student Affairs. Additionally, learning assessment, skill development and tutoring services are available to mediate curricular deficiencies.

# Remediation

The opportunity to remedy academic deficiencies at times other than when the course is regularly scheduled may be extended to medical students who do not fall into a dismissal category, provided they have made a serious effort to earn a passing grade and have sought assistance

A student is expected to take an active role in attemptsions, seeking help from the appropriate faculty, and seeking study skills help through the Office of Student Affairs. Remedial course work must be completed according to the

- A deficiency in a Semester 1 or Semester 2 course must be remedied prior to Semester 3 or as specified by the Student Performance Committee.
- A deficiency in a Semester 3 or Semester 4 course must be remedied before clinical clerkships begin.
- A deficiency in a clinical clerkship must be remedied prior to graduation.

For successful completion of a remedied course the Students who do not meet the standards specified for student must earn a final course grade of 70 or "CR." Fail-

When a course is repeated or remedied, all attempted credit hours and earned grade points are counted in computing the cumulative weighted average. An asterisk is placed next to these courses to indicate that the course has been repeated. Entries for the repeated course and the remedied grade are shown elsewhere on the transcript.

Year 1 and Year 2 medical students taking a full course the second or third years, respectively, if the total number of credit hours failed does not exceed the value assigned to the course having the highest number of credit hours. Correction of deficiencies under these stipulations may be ac-

- A student may be re-examined in no more than one course of seven or more credit hours. A student may be reexamined in no more than three courses that together equal a maximum of eight credit hours.
- The content, scope and format of the examination will be decided by the appropriate department or interdisciplinary unit, and this information will be forwarded to the Student Performance Committee. All examinations should be equivalent to the course's original examinations in level of difficulty. The final recorded grade for any course in which a student has been re-examined will not exceed 70.
- A student may repeat one course in its entirety at an outside institution approved by the appropriate department or interdisciplinary unit or at the University of North Texas Health Science Center, if the full course is offered. The repeated course must be of equal depth, scope and quality as the original course. The final recorded grade for a repeated course will be the numerical grade the student earned in the course.
- The student may be re-examined in no more than two other courses that together do not exceed a total of three credit hours. Students who fail a re-examination

will be required to spend an additional academic year . correcting their deficiencies by repeating the failed vear. During this year the student will enroll in a full course load and must successfully complete all required courses. The final recorded grades for courses repeated during the year will be the numerical grade the student earned in each of the courses. During this period, the student will not be allowed to register for the next year's courses and/or rotations.

- Any student who earns a failing grade in a repeated course will be recommended for dismissal from the . health science center. Year 1 or Year 2 students taking a full course load who have failed less than 25 percent of the year's total credit hours but do not or cannot fit in the category above, which allows correction of deficiencies during the summer, will add an additional year to their medical education. The student will spend the year correcting the deficiencies by taking a full course load and repeating all courses required during that year. The recorded grades for courses repeated during the year will be the numerical grade the student earned in each of the courses. During this time, the student will not be allowed to register for the next year's courses or for rotations.
- Year 3 medical students taking a full course load: The first one or more periods of Semester 5 will be used for remediation opportunities so students may correct deficiencies before beginning clinical rotations. The content, scope and format of the examination(s) will be decided by the appropriate department or interdisciplinary unit, and this information will be forwarded to the should be equivalent to the course's original examinations in level of difficulty. The student's final recorded grade for any course in which the student has been reexamined will not exceed 70. The final recorded grade for a repeated course taken at an outside institution will not exceed 70.
- If students fail a re-examination, they will have to add an additional year to their medical education as described above. Similarly, students who are not eligible or are unable to correct their deficiencies as described above will have to add an additional year to their program. Any student who earns a failing grade in a repeated course will be recommended for dismissal from the health science center.
- Medical students in clinical rotations: A student who earns failing grades in clinical rotations will be required to repeat those rotations. Students will have to add whatever time is necessary to their education to remove the failing grade, possibly delaying graduation. Eligibility for graduation will be achieved whenever the standards have been met and do not require an entire year's delay. Students who do not fulfill all graduation requirements may not participate in the commencement ceremony. In addition, they will not be considered completed all requirements. Any student who earns a failing grade in a repeated rotation will be recommended for dismissal from the health science center.

- Medical students on extended study plans: A student on an extended study plan will be evaluated on the total credit hours taken for that particular year. All requirements and recommendations cited in this document will apply to students on extended study plans. However, determination of options for correcting deficiencies and determination of recommendation for dismissal for the special schedule students will depend on how many total credit hours they are taking during the year.
- A student who is not promoted from one year to the next or who earns failing grades during any year will be placed on academic probation until all deficiencies have been corrected. No more than two years will be allowed for the completion of any one academic year and no more than six years will be allowed for completion of all requirements for graduation (exclusive of a leave of absence). A student may not advance to the next academic year until all failing and incomplete (I) grades are removed.

# Withdrawal

Application of voluntary withdrawal from the health science center must be made in writing to the dean of TCOM. Except in rare and special circumstances, the application will be accompanied with a personal interview by the dean of TCOM. Students who leave the health science center without notifying the dean of TCOM and without completing the established withdrawal procedures within 30 days will automatically be terminated from the health science center.

At the time withdrawal is granted, an entry will be made Student Performance Committee. All examinations on the official permanent record indicating the academic standing of the student. "Withdrawal in good standing" will be recorded if the student is not on academic probation and has maintained a cumulative grade of 70 or above in each enrolled course during the semester in which the withdrawal is requested. "Withdrawal not in good academic standing" will be recorded if the student is on academic probation or has maintained a cumulative grade of 69 or below in enrolled courses during the semester in which the withdrawal is requested.

In addition, students must report to the Office of Student Affairs to obtain and complete a withdrawal form before they can officially withdraw from the health science center. Students who do not complete this application for voluntary withdrawal will not be entitled to an official withdrawal and, consequently, will not be considered for re-admission at a later date.

Re-admission for students withdrawing in good academic standing is not assured unless it is part of the final decision and/or agreement made by the withdrawing student and the dean of TCOM. This final decision and/or agreement will be in writing. Students granted re-admission following withdrawal in good academic standing usually will re-enter at the beginning of an academic year and must register for all courses scheduled during the academic year araduates in any capacity until they have successfully of their withdrawal, including those previously completed and passed, unless otherwise stipulated in the agreement.

Students who withdraw while not in good academic standing may request re-admission through the admissions

application process. The Admissions Committee will evaluate the student's entire academic record and make a rec- . ommendation to the dean of TCOM.

The academic record of any student who has been dismissed and re-applies for re-admission will be part of the data reviewed for re-admission.

It should be clearly understood that the health science center, after due consideration and process, reserves the . right to dismiss any student at any time before graduation if circumstances of a legal, moral, behavioral, ethical, health or academic nature justify such an action.

Any student who withdraws due to poor academic progress, re-enters the health science center and receives a failing grade in any course will be recommended for uncon- secutive years is required to meet the graduation requireditional dismissal with no opportunity for re-admission.

# Dismissal

Dismissal from the health science center will be recommended if:

- A student's cumulative weighted average for any one academic year is less than 70.
- in any one academic year.
- A student fails a course for the second time (no readmission would be granted at a later date).
- A student exceeds the two-year limit for completing one academic course or the six-year limit for completing requirements for graduation, exclusive of a leave of absence or withdrawal in good standing.
- A student has not demonstrated continued academic and professional growth and achievement.
- A student has not passed the national board examinations as set forth in policies of the health science center and by the National Board of Examiners for Osteopathic Physicians and Surgeons, Inc.

# **Requirements for Graduation:**\* Class of 2010

Students who have satisfactorily completed all academic requirements and who have been recommended by the health science center faculty may be awarded the doctor of osteopathic medicine degree, provided they are of good moral character and that they:

- have maintained a cumulative weighted average of at least 70, have no unremedied failing grades and no grades of "I;"
- are at least 2l years of age;
- have been in residence for four academic years at an accredited college of osteopathic medicine or college of medicine, the last two years of which must have been at TCOM;
- have completed the licensing examination board review program;
- have passed Level I and Level II of the Comprehensive Osteopathic Medical Licensing Examination; and taken and passed COMLEX Level II-PE.
- have complied with all legal and financial requirements of the college:
- have exhibited the ethical, professional, behavioral and personal characteristics necessary for the practice of

osteopathic medicine;

- have completed an Exit Questionnaire and the Clearance Check Form from the Office of the Registrar. The Clearance Check Form, which must be returned to the registrar before graduation, is placed with the student's permanent record and serves as the final clearance from campus: and
- attend the commencement at which the degree is to be awarded (only in unusual circumstances and with approval of the president will a degree be awarded in absentia).

A student who completes the curriculum in four conments listed in the TCOM Catalog published for the year entered and/or any subsequent or additional program reguirements. In the event of an extension beyond the four years, the student must meet the requirements for the class with whom the individual graduates.

\* Students who do not fulfill all graduation requirements by graduation A student earns failing grades in two or more courses day will not be allowed to participate in the commencement ceremony. In addition, they will not be considered graduates in any capacity until they have successfully completed all requirements.

# Postdoctoral Medical Training

The Texas College of Osteopathic Medicine (TCOM) encourages graduates to complete at least three years of osteopathic postdoctoral training and supports the completion of an osteopathic internship, either traditional, special emphasis or specialty tracking. All internship, residency and fellowship programs sponsored by TCOM are affiliated with the Texas Osteopathic Postdoctoral Training Institutions (Texas OPTI). This educational consortium includes TCOM and the following hospitals and medical centers:

Bay Area Corpus Christi Medical Center 7101 S. Padre Island Dr. Corpus Christi, TX 78412 (361) 761-3280 Mel Eliades, DO, Director of Medical Education

John Peter Smith Hospital 1500 S. Main St. Ft. Worth, TX 76104

(817) 927-1173 Samuel T. Coleridge, D.O., Director of Medical Education

Family Practice Foundation of the Brazos Valley
1301 Memorial Dr. #200
Bryan, TX 77802
(979) 862-4465
Michael Muggiero, D.O., Director of Medical Education

Methodist Charlton Medical Center 3500 Wheatland Rd. Dallas, TX 75237 (214) 947-5441 Thomas Shima, D.O., Director of Medical Education

Plaza Medical Center of Fort Worth 900 8th Avenue Ft. Worth, TX 76104 (817) 347-5887 Don N Peska, DO, Director of Medical Education

Texas Tech University Health Science Center-Lubbock 3601 4th Street Lubbock, TX 79430 (806) 743-2770 Ron Cook, D.O., Director of Medical Education

For more information, contact these facilities or: Don N. Peska, DO, Associate Dean for Educational Programs Texas College of Osteopathic Medicine 3500 Camp Bowie Blvd., Suite 818 Ft. Worth, TX 76107 (817) 735-2149 dpeska@hsc.unt.edu

or view the Texas OPTI website at <u>www.texasopti.hsc.unt.edu</u>.

# Internship Programs

All Texas OPTI sites offer internship (PGY1) training with some programs tracking into residencies. Applicants are required to participate in ERAS and the National Matching Service for osteopathic internships. Interested candidates are urged to contact the Director of Medical Education for more information on specific programs.

Bay Area Corpus Christi Medical Center Special Emphasis Internship in Family Practice Traditional Internship

- Family Practice Foundation of Brazos Valley Family Practice
- John Peter Smith Hospital (Fort Worth) Traditional Internship
- Methodist Charlton Medical Center (Dallas) Special Emphasis Internship in Family Practice Traditional Internship
- Plaza Medical Center of Fort Worth Traditional Internship Specialty Track Internship in Internal Medicine Special Emphasis Internship in Family Practice Special Emphasis Internship in General Surgery
- Texas Tech University Health Science Center-Lubbock Special Emphasis Internship in Family Practice Traditional Internship

# Residency/Fellowship Programs

All residency and fellowship programs sponsored by the Texas College of Osteopathic Medicine are accredited by the American Osteopathic Association and the associated specialty colleges. Successful graduates of these programs are eligible to sit for certification examination by the corresponding specialty board. Interested candidates are advised to contact the Director of Medical Education for admissions requirements and application procedures. Program descriptions are available at the Texas OPTI website, <u>www.texasopti.hsc.unt.edu</u>.

Bay Area Corpus Christi Medical Center Family Practice

John Peter Smith Hospital (Fort Worth) Obstetrics-Gynecology Psychiatry Radiology

Methodist Charlton Medical Center (Dallas) Family Practice

Plaza Medical Center of Fort Worth Cardiology Cardiothoracic Surgery Family Practice General Surgery General Vascular Surgery Internal Medicine Interventional Cardiology Neuromusculoskeletal Medicine/OMM Neuromusculoskeletal Medicine/OMM Plus One Rheumatology

Texas Tech University Health Science Center-Lubbock Family Practice

# Master of Physician Assistant Studies

# Admission Requirements

Physician Assistant Studies Admissions Office Phone: (817) 735-2204 or 1-800-535-8266 www.hsc.unt.edu

To be considered for admission to the Master of Physician Assistant Studies degree program, an applicant must have participated in the competitive admissions process and previously obtained a minimum of 90 transferable semester hours of prerequisite college credit at colleges and universities located within the US and accredited by agencies recognized by the US Department of Education, *or* coursework deemed equivalent by the PA admissions committee. The minimum semester credit hour requirement cannot be waived. The minimum overall grade point average (GPA) required for admission is 2.85. All enrolled students must meet the program's minimum *Health and Technical Standards* to participate in the program. A standardized entrance exam is not required.

# Prerequisite Coursework

The minimum prerequisite coursework requirements cannot be waived and must be obtained by the posted deadline(s) from accredited colleges or universities, recognized by the US Department of Education, and located within the United States. Exceptions are not permitted. Prerequisite coursework must be satisfied with a grade of "C" or higher (2.0 on 4.0 scale). A single course cannot be used simultaneously to meet more than one course prerequisite. All coursework completed by the applicant will be considered in the admissions process.

# **General Course Requirements**

English Composition	6
U.S. History	6
U.S. Government (Applicants are exempt from the above re- quirements if they hold a Bachelor's Degree from an accredited U.S. university prior to the application deadline)	6
General Psychology	3
Psychology, Sociology OR Anthropology	6
Mathematics: College Algebra or higher	3
Statistics	3
Science Course Requirements	
Anatomy & Physiology (with lab)	8
General Microbiology (with lab)	4
Organic Chemistry (with lab)	4
Immunology or Genetics	3
Biochemistry or Cellular Biology	3

Coursework is converted to semester credit hours when calculating GPA and when determining if minimum prerequisite requirements have been met. Meeting the prerequisite requirements generally calls for completion of courses designed for science majors; courses offered for nonscience majors do not typically satisfy the prerequisite requirements of anatomy, physiology, microbiology or organic chemistry. A maximum of three (3) semester credit hours in each of the following categories, English, U.S. History, U.S. Government, or Psychology, may be obtained through advanced standing examination such as CLEP or its equivalent. These prerequisites can only be exempted if the applicant has received a bachelor's degree from an accredited U.S. college or university, recognized by the US Department of Education, by the posted completion deadline for of prerequisites. Prerequisite credit through advanced standing examinations such as CLEP (or equivalent) is not acceptable for science coursework other than psychology. Credit for coursework obtained through correspondence or television courses will be recognized as meeting prerequisite requirements as long as course credit is awarded from an accredited U.S. college or university, recognized by the US Department of Education.

# Foreign Coursework

An applicant with academic credentials from a college or university located outside the United States, who chooses to apply that study toward meeting prerequisite requirements, must follow all instructions posted in the Centralized Application Service for Physician Assistant (CASPA) application. Applicants must follow application instructions when submitting coursework from foreign colleges or universities for U.S. equivalence through CASPA. Upon satisfying all prerequisite requirements, applicants with academic credentials from non-U.S. colleges or universities are processed with the same consideration as all others.

# Transcripts

Official transcripts submitted for evaluation in the admissions process must be official and must be submitted according to instructions published by the application service. Upon acceptance of an offer of enrollment new official transcripts must be requested again by the candidate from the originating institution and sent directly to the PA Admissions office. Official transcripts must list all classes taken including those taken between initial application and final matriculation into the program.

# Prerequisite Coursework Substitution

Prospective applicants seeking substitution for prerequisite coursework should submit their request via e-mail to: PAAdmissions@hsc.unt.edu or by regular mail to:

Office of Admissions and Outreach Attn: PA Admissions University of North Texas Health Science Center 3500

Camp Bowie Boulevard Fort Worth, TX 76107-2699 A catalog description or course syllabus from the col-lege or university where the course was completed must be submitted along with the request. If a catalog description is not available, a letter from the education department that offered the original course describing the content and na-ture of the course may be substituted. Coursework substitutions and content hours must be equivalent or comparable to the prerequisite. Substitutions are approved on an individual basis. The program reserves the right to approve or disapprove any prerequisite coursework substitutions.

# Admission Procedures

We use a rolling admissions process that begins in November. Early application is recommended. To be considered for admission, a complete application must be received for the year in which the candidate is applying. Applications cannot be held over for subsequent years. Applications to the Master of Physician Assistant Studies Program are accepted through the Centralized Application Service for Physician Assistants (CASPA) between May and November 15. (Note: In 2007, this application deadline will change to November 1.) Fees for application are posted at the on-line application service (CASPA web site), which can be found at www.caspaonline.org. It is strongly recommended that application materials, fees, transcripts, and references forms be submitted 30 days before the advertised deadline in order to allow for timely receipt and processing; this gen-erally takes 3 to 4 weeks. Applications received late in the admissions process have reduced chances for timely con-sideration. Applications submitted after the advertised deadline will not be considered. In addition to the CASPA application, all applicants are required to submit a Secondary Application. Once the completed application CASPA has been received at UNTHSC, notification (by e-mail) will be sent directly to the applicant containing their Enterprise User Identification (EUID) and Personal Identification Number (PIN), along with instructions for completing the secondary application. These numbers will be needed to access the secondary application, which is completed online.

Applicants should not send application materials, transcripts, reference letters or additional information to the PA Admissions office unless specifically requested to do so. The program does not assume any responsibility for application materials sent to CASPA by the applicant and will not forward materials to the application service for applicants.

# Applicant Selection

The Dean of the Texas College of Osteopathic Medicine has final approval for all admission decisions. Successful applicants are expected to complete a personal interview conducted at UNT Health Science Center in Fort Worth prior to selection. Only top competitive applicants will be offered an interview. The Physician Assistant Admissions Committee seeks applicants academically qualified to pro-gress through the curriculum. Although an applicant's entire academic record is considered, academic excellence alone does not assure acceptance. Evidence of personal integ-rity, maturity, creativity, motivation, dedication and the abil-ity to work with others are factors that will be considered. These qualities and attitudes are evaluated by sev-

eral means, including letters of evaluation, the scope and na-ture of extracurricular activities (including work and volun-teer experience), the scope and breadth of prior education and through interviews. Although prior experience in a health care setting is not required, this experience is considered a beneficial attribute and viewed positively by the Physician Assistant Studies Admissions Committee. The University of North Texas Health Science Center is committed to the policy that all applicants will be considered without regard to age, race, creed, sex, national origin, veteran's status or disability. Consistent with the mission of the Master of Physician Assistant Studies degree program to serve the health care needs of Texans, the percentage of Texas residents admitted to each PA class will be the same as that established for the DO degree program of Texas College of Osteopathic Medicine, which currently is at least 90 percent Texas residents.

# Texas Residency

The Texas Higher Education Coordinating Board sets rules and regulations for determining residency status. Up to 10 percent of each entering class may be filled with non-Texas residents. An alien living in the United States under a visa permitting permanent residence or who has filed with the proper federal immigration authorities a declaration of intention to become a citizen has the same privilege of qualifying for Texas residency as do citizens of the United States. Residency is based on the student's status on the first day of registration. Questions regarding requirements should be referred to the PA Admissions office.

# **Transfer Policy**

All applicants must participate in a competitive admissions process. The program does not admit transfer students from other physician assistant programs or applicants who have completed less than the prerequisite coursework requirement.

# Advance Placement/Course Waivers

Advance placement and/or course waivers may only be considered once the student is already enrolled in the Master of Physician Assistant Studies program and that student has: 1) successfully completed the exact or nearly exact same course as that listed in the current MPAS curriculum; 2) taken the exact or nearly exact same course within 3 years of enrollment into the MPAS curriculum; 3) completed the exact or nearly exact same course with a letter grade of "B" or better; and 4) has obtained written approval of the Director of PA Studies. Advance placement/course waivers may not be offered or approved during the admissions process. Requests for advance placement or a course waiver must be initiated by the student in writing within 5 class days of enrollment into the MPAS curriculum. No requests for course exemption will be considered after that time. Approval of advanced placement and/or course exemption is determined on a case-by-case basis.

# Tuition, Fees and Other Charges – 2006-2007

# Tuition

i uluon	
Texas Resident	\$17,940 (charged over the course of the program)
Non-Resident	\$58,746 (charged over the course of the program)
Fees	
Medical Malpractice Fee:	\$600 (charged over the course of the program)
Student Service Fee:	\$1062 (charged over the course of the program)
Medical Service Fee:	\$600 (charged over the course of the program)
Library Use Fee	\$450 (charged over the course of the program)
Activity Center Fee:	\$225 (charged over the course of the program)
Student Center Fee	\$90 (charged over the course of the program)
Laboratory Fee:	\$75 (charged over the course of the program)
Clinic/Lab Coat Fee:	\$30 (one-time charge at matriculation)
Matriculation Fee:	\$25 (one-time charge at matriculation)
Anatomy Fee:	\$100 (charged over the course of Year 1 and Year 2)
Publication Fee:	\$12 (per academic year)
Graduation Fee:	\$100 (one-time charge at graduation)
Student Identification Card:	\$25 (one-time charge)
Course Fees:	\$445 Year 1; \$385 Year 2; \$405 Year 3
Other Charges	
Late Registration Fee:	\$25
Late Tuition Fee:	\$15 per month, to be applied as of the first day the month following each beginning semester date
Installment Payment Plan Fee:	\$15
ID Card Replacement Fee:	\$25
Transcript Fee:	\$4 per copy. The first TCOM transcript is free.
Special Examinations:	These are based on the charge of the examining body or agency at the time of the examination.
Parking Fee (optional):	\$80

Tuition and fees are subject to change by the Board of Regents, the Texas Legislature and legal rulings of the Texas Attorney General.

# Health and Technical Standards

All candidates for enrollment must meet certain health and technical standards to participate in the Physician Assistant (PA) educational program. Graduation signifies the graduate is prepared for entry into the practice of medicine with the requisite knowledge and skills to function in a broad variety of clinical situations and provide a wide spectrum of patient care. Technological compensation can be made for some disabilities in certain areas, but the PA candidate should be able to perform in a reasonably independent manner upon graduation. The use of a trained intermediary (or trained intermediaries) during the educational program requires the student's judgment to be mediated by someone else's power of selection and observation and is not a permissible accommodation. A candidate for the MPAS degree must have abilities and skills in the following five areas:

<u>Observation</u>: Observation requires the functional use of vision and somatic sensations. The candidate must be able to observe demonstrations and experience lessons in the basic sciences including, but not limited to, physiological and pharmacological demonstrations in animals, microbiologic cultures, and microscopic studies of tissues

in normal and pathologic states. A candidate must be able to observe a patient accurately at a distance and close at hand. Observation is enhanced by functional use of the sense of smell.

<u>Communication</u>: A candidate should be able to speak, hear and observe in order to elicit information, describe changes in moods, activity and posture, and perceive nonverbal communications. A candidate must be able to communicate effectively and sensitively with patients. The candidate must be able to communicate effectively and efficiently in oral and written form with all members of the health care team.

<u>Motor</u>: Candidates should have sufficient motor function to elicit information by palpation, auscultation, percussion and other diagnostic and therapeutic maneuvers. This includes performance of basic laboratory tests (urinalysis, CBC, etc.) and may also include diagnostic procedures (proctoscopy, paracentesis, etc.) and reading EKGs and Xrays. A candidate should be able to execute movements which are reasonably required to provide general care and emergency treatment to patients. Examples of emergency treatment reasonably required include the application of pressure to stop bleeding, the opening of obstructed airways, and the performance of simple obstetrical maneuvers. Such actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the senses of touch and vision.

Intellectual: Candidates should possess Conceptual, Integrative and Quantitative Abilities. These include obtaining measurements and performing calculations, reasoning, analysis and synthesis. Problem solving, the critical skill demanded of physician assistants, requires all of these intellectual abilities. In addition, candidates should be able to comprehend three-dimensional relationships and to understand spatial relationships of structure.

<u>Behavioral</u>: Candidates must have sufficient emotional health required for full use of their intellectual abilities in the exercise of good judgment and prompt completion of all • responsibilities attendant to the diagnosis and care of patients in a mature, sensitive and effective relationship to patients. Candidates must be able to function effectively under stress. They must be able to adapt to changing environments, display flexibility, and learn to function in the face of uncertainties inherent in the clinical problems of many patients. Compassion, integrity, concern for others, interpersonal skills, interest and motivation are all personal qualities which are assessed during the admission and education process.

# Course of Study Teaching Goals

Basic professional competencies represent the majority of study for PA students. Overall goals of the Master of Physician Assistant Studies (MPAS) program are to:

- Educate physician assistants who are equipped through academic and clinical training to provide patient care services with the appropriate supervision of a licensed physician.
- Provide a course of professional study that provides graduates with appropriate knowledge of physical and mental disease and the skills to accurately and reliably perform the range of health care procedures and duties customarily ascribed to the PA profession.
- Foster development of the intellectual, ethical and professional attitudes and behaviors that generate trust and respect from the patient population served by the physician assistant.
- Prepare physician assistants with the knowledge, technical capabilities and judgment necessary to perform in a professional capacity.
- Prepare physician assistants to serve in expanded roles, which meet developing needs in society's health care environment.
- Prepare physician assistants through curriculum, clinical experiences and role models to provide medical services to underserved patient populations where the supervising physician may be physically located at the practice site or at a site remote from the physician assistant.
- Provide instruction that stresses the role of the physician assistant in health maintenance and preventive

medicine while also taking into consideration the social, economic and ethical aspects of health care delivery.

- Provide didactic and clinical experiences that prepare the physician assistant for dealing with cultural diversity in the patient population.
- Provide educational experiences that promote understanding of the interdependence of health professionals and foster an interdisciplinary team approach to the delivery of primary health care.
- Prepare the physician assistant with the knowledge and skills needed to perform clinical research activities and projects.
- Prepare physician assistants with the knowledge and skills needed to be life-long learners and design educational activities appropriate for patients, clinical students, and colleagues.
- Provide educational experiences that stimulate active learning in the science and art of medicine and that foster a desire for continued learning as a practicing professional.

# Curriculum

Year 1: Fal	Year 1: Fall (PA Class of 2009)				
Course #	Course Name	SCH Hrs	Approx Time		
PA 4104	Basic Human Sciences	12	July 31, 2006 through		
PA 4211	Medical Interviewing	2	Dec 15, 2006		
PA 4212	Physical Exam Skills with lab	4			
PA 5107	Principles of Evidence-Based Medicine	2			
PA 5210	Introduction to PA Master's Project	1			
PA 5202	Introduction to PA Profession	1			
Year 1: Sp	ring (PA Class of 2009)				
Course #	Course Name	SCH Hrs	Approx Time		
PA 4222	Physical Diagnosis with lab	3	Jan 8, 2007 through		
		0	May 18, 2007		
PA 4450	Professional Issues for Medical Practice/Ethics	3			
PA 5212	Underserved Primary Care	3			
PA 5301	Introduction to Disease	5			
PA 5303	PA Master's Project	1			
PA 5602	Fundamentals of Behavioral Science	3			
PA 5603	Introduction to Pharmacology/Clinical Therapeutics	3			
Year 1: Su	mmer (PA Class of 2009)				
PA 5303	PA Master's Project	1	June 4, 2007 through		
PA 5304	Introduction to EKG	2	July 13, 2007		
PA 5202	Emergency Medicine	2			
Year 2: Fall (PA Class of 2008)					
Course #	Course Name	SCH Hrs	Approx Time		
PA 4441	Supervised Practice I with practicum	2	July 31, 2006 through		
PA 4532	Health Promotion/Disease Prevention 1	2	Dec 15, 2006		
PA 5303	Independent Study: PA Master's Project	1			
PA 5602	Fundamentals of Behavioral Science	3			
PA 5602	Integrated PA Clinical Medicine I with Clinical Integration Labs	15			
1 A 0000		15			
Year 2: Sp	ring (PA Class of 2008)				
Course #	Course Name	SCH Hrs	Approx Time		
PA 4450	Professional Issues for Medical Practice/Ethics	2	Jan 2, 2007 through		
PA 4542	Supervised Practice II with practicum	2	April 28, 2007		
PA 5303	Independent Study: PA Master's Project	1			
PA 5702	Clinical Skills	2			
PA 5712	Integrated PA Clinical Medicine II with Clinical Integration Labs	14			
Year 3: Su	mmer, Fall, Spring (PA Class of 2007)				
Course #	Course Name	SCH Hrs	Approx Time		
PA 650	Elective Practicum	4	May 2006		
PA 651	Master's Clinical Practicum	4	through		
PA 653	Internal Medicine	8	May 2007		
PA 654	Pediatrics	4	May 2007		
		8			
PA 655	Family Medicine	-			
PA 656	Psychiatry	4			
PA 657	Surgery	8			
PA 658	Obstetrics & Gynecology	4			
PA 659	Emergency Medicine	4			
PA 690	Senior Seminar	1			
	GRAND TOTAL	141			

# **Course Descriptions**

# PA 4104. Basic Human Science

Basic Human Science is an integrated course offered by the departments of Pathology and Anatomy, Integrative Physiology, and Molecular Biology and Immunology. The course content consists of human anatomy, including radiographic anatomy, biochemistry and physiology. The approach used in this course is the study of body systems, relating structure and biochemical proc-esses to the function of each system as it strives to main-tain homeostasis.

# PA 4211. Medical Interviewing

This course is based upon a series of lectures and application exercises designed to teach medical interviewing techniques and communication skills. The course is supplemented by video feedback experiences. Lectures focus on patient-centered and provider-centered interviewing processes useful in obtaining information, defining symptoms, organizing data and documenting the patient chart. The course will incorporate the use of medical terminology in medical understanding and documentation.

# PA 4212. Physical Exam Skills

This is a lecture and laboratory course that emphasizes inspection, palpation, percussion, and auscultation in a screening physical exam of the average patient. Psychomotor skills for exams and verbal descriptions of regular exams are equally emphasized. Accuracy, efficiency, thoroughness and reliability of a complete screening physical exam are stressed and carefully evaluated in this course. The course will also include the proper documentation of the physical exam and the use of appropriate medical terminology in the documentation.

# PA 4222. Physical Diagnosis

This course is designed to expand on the Medical Interviewing and Physical Exam Skills courses taken previously in the curriculum. Physical diagnosis will focus on common disease processes and the specific historical information and physical findings typically encountered in practice with these problems. Disease scripting and clinical decisionmaking will be introduced here.

# PA 4532. Health Promotion and Disease Prevention in Practice

This is an interactive course that stresses the role of the physician assistant in health promotion and prevention in medical practice. Students are encouraged to consider the social, psychological, spiritual, economic, cultural and ethical aspects of health promotion and challenges of the modern health care delivery system. Emphasis is added in the practical application of health promotion and preventive medicine principles and goals.

# PA 5107. Principles of Epidemiology and Evidence-Based Medicine

This is a course dedicated to the knowledge base and skills needed by clinicians for the critical analysis of clinically re-

lated journal articles and the practice of medicine as it relates to the evidence in the literature.

# PA 5201. Introduction to PA Master's Project

All PA students are required to complete a Master's project in order to graduate. This course is designed to introduce the requirements of a Physician Assistant Master's project and to ensure PA students acquire the necessary research knowledge and skills to implement their PA Master's projects. In this course, PA students will identify an area of interest and develop a feasible prospectus for their Master's projects.

# PA 5202. Introduction to Medical Practice

This course provides an introduction to the Physician Assistant (PA) profession by examining the historical development of the profession, the role of the PA in healthcare delivery and the professional and social issues related to PA practice. In doing so, students are anticipated to begin establishing the foundations necessary for adopting a professional code of ethics.

# PA 5212. Underserved Primary Care

A course designed to prepare the physician assistant for underserved primary care practice by examining issues specific to underserved patient populations, underserved health care delivery settings, and underserved community health needs.

# PA5222. Educational Strategies for PA's

A course designed to prepare the physician assistant to be a life-long learner and educator of patients and colleagues by examining the characteristics of the adult learner, and basic competencies and skills for developing educational activities, based upon the purposes and needs of the learning situation. This course will include the basic principles and tools for measuring whether learning outcomes have been achieved.

# PA 5301. Introduction to Disease

This course introduces the basic etiologies and pathogenesis that underlie all diseases. The course describes the mode of origin and development of most diseases, emphasizing pathophysiology in the areas of tissue inflammation, dysplasia, micro-organisms, immunity, genetics and metabolism.

# PA 5303. Independent Study: PA Master's Project

All PA students are required to complete a major master's project in order to graduate. The goals of this course are to initiate students' independent study attitude and to familiarize students with formats of scholarly activities by implementing their Master's projects. In this course, PA students will be required to conduct, complete and present their master's projects for program completion prior to graduation. Faculty will be made available to guide and monitor the student's progress and assess the quality of the work presented.

# PA 5304 Introduction to Electrocardiography

A clinical medicine course designed to educate the Physician Assistant student on the utilization and interpretation of the electrocardiogram. This course will utilize lecture, reading assignments, and laboratory experiences. Course content includes an overview of the electrophysiology of the heart, basic approach to the evaluation of an electrocardiogram, obtaining a 12 lead electrocardiogram and rhythm strip, recognition of cardiac abnormalities such as dysrhythmias, ischemia, infarction, cardiac inflammatory conditions, conduction abnormalities, and chamber enlargement.

# PA 4441. Supervised Practice I

This course is designed to introduce the student to direct patient care learning situations and provide a venue for the practice of medical interviewing and physical exam skills. The primary focus is to elicit and document a complete history and physical exam on actual patients.

# PA 4450. Professional Issues for Medical Practice

A series of lectures as well as large and small group discussions of current topics on professional, legal, and ethical issues in health care that effect Physician Assistant practice. Professional issues include topics important to the Physician-PA-health care team, such as PA professional credentials and marketing, medical jurisprudence, health care organizations, health care policy, reimbursement issues, and office management skills. The course will also focus on ethical situations and dilemmas relevant to clinical practice and its relationship with the unique role of the Physician-PA team."

# PA 4542. Supervised Practice II

This course provides supervised clinical experiences for the purposes of problem-oriented patient data gathering and reporting on real or simulated patients. Clinical decision-making skills and disease scripting are further refined in this course through practical experiences and case presentations.

# PA 5502. Emergency Medicine (Year 1)

This course introduces the student to common problems encountered in emergency medicine. Attention is given to evaluation, diagnosis, and treatment of common conditions seen in emergency room settings. The course includes clinical integration labs (CILs) conducted in workshop formats that allow for learning patient management skills through case studies, patient presentations, and evaluation of outcomes. Effort is made to guide the students in developing skills of medical problem-solving and self-directed patient management.

# PA 5602. Fundamentals of Behavioral Science

This course is designed to introduce the student to common psychosocial disorders encountered in primary care practice. The focus of this course is the clinical presentation, differential diagnosis, clinical pharmacology, and opportunities for prevention of the most common presenting psychosocial disorders.

# PA 5603. Introduction to Clinical Therapeutics

This course introduces the student to basic principles of pharmacology and focuses on the major drug classifications discussed in the Integrated PA Clinical Medicine courses, including mechanisms of action, side effects, and commonly prescribed medications in each category. Students also learn prescription writing skills and drug calculations to insure appropriate dosage.

# PA 5609. Integrated Clinical Medicine I with Clinical Integration Labs

The course presents a multidimensional approach to the understanding of the most common clinical disorders in the following areas: dermatology, ophthalmology, otorhinolaryngology, the pulmonary system, the cardiovascular system, the musculoskeletal system, the neurological system, and the endocrine system. Attention will be given to diagnosis, pathophysiology, treatment and outcome measurement of common disease processes encountered in primary care. The course will include clinical integration labs, conducted in workshop/laboratory formats, allowing maximum participation. Attention in the labs will be given to learning patient management through case studies, incorporating patient presentations, the development of differential diagnoses, the clinical approach to patient diagnosis, treatment options and outcome measurements. Effort is made to guide the students in the skills of medical problem-solving and self-directed patient management.

# PA 5702. Clinical Skills

This course is designed to teach students the basic clinical skills utilized in primary care practice. Areas of focus include suturing, sterile technique, casting, venipuncture, IV's, and intubation.

# PA 5712. Integrated Clinical Medicine II with Clinical Integration Labs

The course presents a multidimensional approach to the understanding of the most common clinical disorders in the following areas of clinical practice: the urinary/renal system, the reproductive system, the gastrointestinal system, multisystem diseases, geriatrics, and pediatrics. Attention will be given to diagnosis, pathophysiol-ogy, treatment and outcome measurement of common dis-ease processes encountered in primary care. The course will include clinical integration labs, conducted in workshop/ laboratory formats, allowing maximum participation. Atten-tion in the labs will be given to learning patient manage-ment through case studies, incorporating patient presenta-tions, the development of differential diagnoses, the clinical approach to patient diagnosis, treatment options and out-come measurements. Effort is made to guide the students in the skills of medical problem-solving and self-directed patient management.

#### *Clinical Practica* PA 650. Elective Practicum

This is an elective clinical practicum in an area chosen by the student, according to the student's individual clinical interest. Pending the approval of the clinical education coordinator and clinical preceptor, students are responsible for developing their own educational goals and objectives for this practicum.

# PA 653. Internal Medicine Practicum

This practicum focuses on the adult patient population by concentrating on in-depth evaluation and ongoing treatment of patients with complex problems and/or chronic illness. Students learn the skills necessary to evaluate and manage the effects of chronic disease on multiple body systems and perform or assist in procedures commonly performed in internal medicine. This practicum contains experiences in both the outpatient and inpatient setting for the discipline.

# PA 654. Pediatric Practicum

The patient population includes infants, small children and adolescents to age 18. Students will learn to evaluate, monitor and manage common pediatric problems and emergencies and act as a guide and resource to patients and their families as they progress through the growth and de-velopment from infancy through childhood and adolescence.

# PA 655. Family Medicine Practicum

This practicum encompasses the treatment of patients from pediatrics to geriatrics. It focuses on important aspects related to health maintenance and preventive care, and the tradition-al aspects of medical care as it relates to the patient, family and community. Students will develop the skills necessary to evaluate, monitor and manage common health problems.

# PA 656. Psychiatry Practicum

Students will develop the skills necessary to evaluate and manage patients with a variety of psychiatric problems. The practicum will provide students with the opportunity to develop an understanding of the role of psychiatrists, psycholo-gists, social workers and nurses in the care of psychiatric patients. Students will learn the appropriate use of selected psychoactive pharmaceuticals. There will be opportunities for students to practice the skills necessary to perform a psychiatric inter-view and mental status examination and make referrals for specialized psychiatric treatment.

# PA 657. Surgery Practicum

Within the operating room, students learn to employ proper techniques related to scrubbing (hand washing), gowning and gloving, maintaining sterile fields, retracting, gentle tissue manipulation, hemostasis, various methods of wound closure and dressing application. Additionally, students will learn to recognize and manage common postoperative complications and wound care. Students will learn sterile technique, proper and efficient use of surgical instruments, and evaluation and management of the pre- and post-surgical patient. This practicum contains experiences in general surgery and specialty surgery settings in the outpatient and inpatient areas of the discipline.

# PA 658. Obstetrics & Gynecology Practicum

The focus is on the impact of disease processes related to the reproductive system of female patients. Students will develop the skills and knowledge necessary to evaluate, man-age and educate patients in the areas of women's health, human sexuality, birth control, infertility, pregnancy, pre- and post-natal care, and menopause.

# PA 659. Emergency Medicine Practicum

Students will develop the skills and knowledge necessary to recognize conditions that have the potential to progress to life-threatening or potentially disabling conditions. The student will learn to triage and stabilize patients with lifethreatening or potentially disabling conditions, utilize lab and imaging studies, and interact with other health care professionals and victims' families in times of extreme stress.

# PA 690. Senior Seminar

The senior seminar is a capstone course designed to assess the graduate competencies required for entry into the PA profession in the areas of knowledge base, patient management skills, written and oral communication skills, and professionalism, through the use of specifically designed assessment mechanisms and the review of comprehensive student portfolios. Presentations, lectures and workshops are also provided during the course to assist in students in preparing for the PA National Certifying Examination (PANCE) after graduation.

# Academic & Administrative Policies

Each student enrolled at the Health Science Center is responsible for knowing current academic and administrative policies and procedures that apply to enrollment in their chosen degree program. This section of the catalog provides selected academic and administrative policies unique to the MPAS degree program. Other Health Science Center and TCOM policies also apply to PA students and are contained elsewhere in this catalog or in official Health Science Center publications. The Health Science Center reserves the right to amend or add to these policies and scholastic regulations at any time during an individual student's enrollment period provided that such changes or additions are intended to improve the quality of education and are introduced in a fair and deliberate manner.

# Registration

Registration is conducted each semester and consists of paying tuition and fees as well as completing the appropriate registration forms and submitting them to the offices of the Registrar, Financial Aid and the Student Affairs. Late fees are assessed for late registration for each day following the designated registration date. PA students are only permitted to attend courses and clinical practica listed on their official schedules and/or otherwise approved by the Director of PA Studies. Students are not permitted to enroll in two or more courses scheduled to meet at the same time. Only properly enrolled students will be permitted to attend classes. No record will be kept of academic work done by individuals whose enrollment has not been duly authorized. A check returned because of insufficient funds will incur a penalty and may also result in additional charges for late registration.

# Attendance

# Classroom and Laboratory Attendance

Participation in class and laboratory sessions is essential to good academic performance. Courses are typically offered only once during a student's enrollment period, therefore students are expected to attend all scheduled educational activities. Attendance is required at all laboratories, small group sessions and clinical experiences. The program and/or course director reserves the right to take attendance and students may be asked to sign attendance sheets. No student may sign an attendance roster on behalf of another student. Excessive absences can contribute to a failing grade and lead to dismissal. Each student is responsible for obtaining and learning subject materials presented during their absence. Instructors and/or course directors are not obligated to provide make-up sessions to students. The PA Student Performance Committee is permitted to consider attendance when reviewing a student's performance and making recommendations on probation, remediation and/or dismissal.

# Clinical Practica (Rotations)

Clinical practicum experiences generally will require 40+ hours per week of attendance. Some practica may require students to be available for more than 40 hours a week in order to meet all educational and performance objectives; including taking call and attending to patient care experiences during non-regular hours. Other activities that may require additional attendance by the student include attending rounds and medical education activities; and researching and presenting case studies. Students who become ill or have an emergency which causes them to be absent from any portion of a clinical practicum are required to notify the attending preceptor and the Clinical Education Coordinator as soon as possible. Excused absences are approved by the Clinical Education Coordinator in accordance with school policy. Clinical precep-tors are not authorized to approve excused absences. Stu-dents will usually be reguired to make up any missed time from a practicum experience, even if the absence was con-sidered excused. Students who miss more than 4 days of a practicum may be required to repeat all of the affected clini-cal practicum and be subject to other sanctions, including dismissal.

# **Excused Absence for Special Activities**

Excused absences from regularly scheduled activities are generally granted for emergencies (i.e., death in the family) or personal illness. Under certain circumstances, absences for special activities may also be approved by the Director of the PA Studies. Such approval must be documented and approved prior to the absence. Students are cautioned not to confirm travel plans or purchase nonrefundable tickets until written approval for the absence had been obtained.

# Holidays and Religious Holy Days

Students should consult the official academic calendar for approved holidays. Absences for these days shall be approved in accordance with Health Science Center policy. The Clinical Education Coordinator and clinical preceptors are required to be notified in advance of the absence for religious holy days. Reasonable attempt will be made to accommodate absences for religious holy days where possible. Please refer to Section 51.911 of the Texas Education Code to see applicable guidelines for this policy.

# Leave of Absence

A student in good academic standing may request a Leave of Absence due to a medical or serious personal problem. Students seeking leave of absence should obtain assistance from the Student Affairs office. Requests for Leave of Absence must be submitted in writing. Leave can not be granted for reasons of poor academic standing. Re-quests for Leave of Absence submitted by a student on academic probation shall be considered on a case-by-case basis. A request for Leave of Absence due to medical rea-sons must be accompanied by documentation from a phy-sician or licensed professional describing the nature of the disability and the estimated length of time for recovery. A request for Leave of Absence due to personal reasons may also require substantiating documentation. Students must submit a written request for an approved Leave of Absence through the Director of PA Studies to the Registrar before they can be placed into an approved leave status. In addition, prior to readmission into the program the student must submit a request for readmission through the Director of PA Studies to the Office of the Dean. The request for readmission must be accompanied by documentation (such as a letter from a physician) substantiating the student's ability to participate fully in the academic program upon their return. The student may also be required to reaffirm their compliance with the Health and Technical Standards of the program. Leave of absence will not be approved to extend beyond one calendar year

# Grading

Academic standards for successful completion of each course are contained in the course syllabi. Specific requirements for each course, including academic assignments, evaluation and grading schemes; and other conditions of satisfactory performance are contained in course syllabi. Modifications to course requirements and grading schemes may be made when judged necessary to improve instruction or to conform to scholastic regulations of the college. Students are expected to participate in all scheduled activities. Participation may be considered when assigning course grades.

# Recording Grades

All course grades will be recorded on transcripts as pass/fail, letter grades, credit or no credit, or as numerical grades using a 4.0 scale. Course grades using the 100--point scale are converted as described below:

Letter Grade	100-point scale	4.0 Scale
А	90 - 100	4.0
В	80 - 89	3.0
С	70 - 79	2.0
F	<60	0.0

A grade of "I" (incomplete) may be assigned when a student has not completed all course requirements and assignments due to special circumstances. Students must complete all requirements and assignments for courses and remedy incomplete grades by the end of the fifth class day of the next academic semester or according to a timeframe approved by the Director of Physician Assistant Studies or the Dean. If the didactic course grade is not remedied within that time frame, the student cannot be promoted to the next semester or clinical practica without approval of the Director of Physician Assistant Studies. Students who receive a grade of incomplete on any clinical practica course will have 12 months or less from the date of issuance to fulfill requirements. If all course requirements are not completed, incomplete course grades will automatically convert to "F" or failing for that course.

# **Evaluation of Student Performance**

Successful completion of the curriculum depends upon the student's ability to demonstrate the knowledge, attitudes, and skills commonly held by the graduate physician assistant working in a primary care setting. The use of a trained intermediary by the student is not permitted. Technological compensation and/or reasonable accommodation can be made in certain areas, but the student should be able to demonstrate the competencies contained within the curriculum in a reasonably independent manner.

Frequency of examinations and evaluations is determined by course directors according to the volume and types of material covered. Primary methods used for evaluating student per-formance are by written examination, multiple choice, matching, true/false, short answer and essay-type ques-tions. Evaluation of performance also may include demon-strations of particular skills: examples include identifying and naming anatomic structures, setting up and using a microscope to identify organisms and tissues, suturing of materials and tissues together, medical interviewing and physical examination, clinical problemsolving, and partici-pating in group discussions. In some courses, research, self-learning and written reports are reguired. Evaluation of students in clinical and laboratory settings will often require students to demonstrate visual, somatic, communicative, analytical, behavioral and discriminatory skills. Participa-tion at lectures and laboratory sessions may be used when evaluating student's performance in a course. Professional-ism is also assessed and graded. Students will be required to successfully complete practical assignments that include technical skills, problem-solving skills, interactions with pa-tients and other health care workers, and the use of re-search tools (textbooks, journals and sources of medical information). An overall performance grade based on the above factors is assigned for each course and clinical prac-ticum. Students shall be in-

formed of their progress through formal and informal feedback mechanisms and through grades. Course syllabi contain the value(s) of grade com-ponents during a course. Students are generally advised of their progress through interactions with instructors and preceptors.

# Grade Appeals

Grades are assigned according to requirements contained in the course syllabus. Grade appeals must be submitted in writing and comply with the Student Grievance Policy found in the General Student Handbook. Disputes over individual grades within a course are handled at the course level by the course director and involved faculty members. Course grades may be appealed if: 1) The final course grade has been incorrectly assigned to the student (e.g., to miscalculation or failure to include points earned by the student but not credited towards the final grade); 2) The final course grade has been unjustly rendered (e.g., did not follow the procedures outlined in the course sylla-bus); or 3) The final course grade appears to have been assigned in a capricious manner. A student will first seek to resolve the academic problem or complaint through the appropriate administrative channels, entering at the lowest appropriate level and proceeding in the order contained in the Student Grievance Policy with the exception that the Director of Physician Assistant Studies shall be inserted just ahead of the Associate Dean, who is then followed by the Dean of the Texas College of Osteopathic Medicine. Grade appeals must be submitted within five working days of their official posting. Appeals of decisions must be initi-ated by the student in writing within five (5) working days of receipt of the decision. The decision of the Dean on aca-demic appeals is final.

# Remediation of Failing Course Grades

Phy-sician Assistant students must achieve a passing grade in each course listed in the Master of Physician Assistant Studies curriculum to progress and graduate. Students may be given an opportunity to remedy deficiencies contributing to a failing course grade. This opportunity is a privilege that must be earned by the student. The opportunity to remedy deficiencies often depends on whether the student has made serious efforts to earn a passing grade. These efforts will generally include:

- Attending help sessions
- Participation in each educational experience
- Participating in class, laboratories and small group activities
- Seeking help with study skills through the Office of Academic Support (OASIS)
- Notifying the course director of problems before a failing grade occurs
- Seeking help from the Master of Physician Assistant Studies faculty during the regular offering of the course.

Any student failing a course or clinical practicum will be placed on academic probation. In all cases, grading and learning requirements listed in the course or practicum syllabus will be used to determine a remedy plan for obtaining a passing grade. Subsequent failure of a course or any other course while on academic probation will result in dismissal, unless otherwise recommended for retention by the PA Student Performance Committee and approved by the Dean. Students may be permitted to continue in courses until all remediation opportunities have been completed.

# Promotion/Probation and Dismissal

Each student must meet the minimum standards and requirements set by the PA Studies Program, the Texas College of Osteopathic Medicine, and the University of North Texas Health Science Center to remain in good standing. The PA Student Performance Committee (PASPC) may be called upon to evaluate an individual student's progress and/or performance in order to provide recommendations on matters of probation, dismissal, promotion, retention, graduation, and remediation. Normal progression through the curriculum requires students to satisfactorily complete all course requirements to graduate. The program does not guarantee any student that they will accomplish all degree requirements once enrolled. Students who do not meet standards for promotion and graduation may be offered opportunities to correct deficiencies according to guidelines in the individual course syllabus and/or program policy.

# Non-academic Probation

Enrollment at the health science center is considered implicit acceptance of the rules, regulations, and guidelines governing student behavior and promulgated by the institution. The student is responsible for being aware of these requirements. In addition, all students are expected to know and obey the requirements of federal, state, and local laws. Any student who violates a provision of those laws is subject to disciplinary action, including expulsion, notwithstanding any action taken by civil authorities on account of the violation. Special care shall be taken to assure due process and to identify the defined routes of appeal when a student feels their rights have been violated. PA students may be subject to misconduct penalties and placed on nonacademic probation for breaches of conduct contained in the Student Code of Conduct and/or a course syllabus.

# Academic Probation

"Good" standing requires maintenance of a cumulative grade point average of 2.50 or better in the MPAS curriculum. Any student whose academic performance falls below minimum standards may be placed on academic probation. A student who fails a course during their enrollment will be placed on academic probation, which serves notice to the student that their continued enrollment is subject to remedy of failing grades and satisfactory performance in all subsequent courses. A student who fails to meet minimum standards of academic performance or who fails to pass a course a second time will be recommended for dismissal. Students not in good standing or on academic probation are not eligible to hold office in sanctioned student groups and therefore may be required to resign from any elected or appointed positions held.

# Marginal Performance

Any student whose overall GPA falls below 2.85 for a single semester will be considered as having marginal performance. First or second year PA students with marginal performance will be required to meet with the Director of PA Studies (or designee) and the Vice President of Student Affairs (or designee) to develop a plan for improving their performance. If the student's overall GPA falls below 2.50 and based upon a recommendation by the Academic or Clinical Coordinator for the program, the student may be considered for placement on academic probation .

# Dismissal

A student may be dismissed from the program if that student:

- Earns a failing grade in any course
- Fails a course due to unprofessional behavior
- Fails any course a second time
- Fails to progress satisfactorily as outlined in an approved remediation plan
- Fails to comply with the Student Code of Conduct

Failure to earn a passing grade for a course will be considered grounds for automatic dismissal unless otherwise approved for retention by the Dean. The PA Student Performance Committee is not restricted from recommending PA students for probation or dismissal for reasons of unethical, unprofessional, and/or unacceptable behavior by the student. Failure due to poor class participation must be documented. Students who do not meet the standards specified for promotion and graduation may be given opportunities to correct deficiencies. Any student failing a course while on academic probation is subject to automatic dismissal, unless otherwise recommended for retention by the PA Student Performance Committee and approved by the Dean.

# **Re-Admission after Dismissal**

Any student seeking readmission after dismissal from the PA program must apply through the normal admissions process. The academic record of any student who applies for re-admission will automatically become a part of the data considered by the admissions committee. Any student who is readmitted and subsequently receives a failing grade in any course will be automatically recommended for dismissal without an opportunity for subsequent readmission.

# Requirements for Graduation:\*

Graduation requirements are listed in the catalog at the time of the student's entry into the Master of Physician Assistant Studies program. Normally, these requirements can be satisfied within 36 consecutive months. Students may be required to meet additional requirements in order to meet other health science center, accreditation, state or national standards and/or regulations. Students who have met all requirements and been recommended for graduation may be awarded the Master of Physician Assistant Studies (MPAS) degree provided they meet the conditions listed below:

- Have completed all academic requirements and achieved grades of C, Credit, Pass or better in assigned courses.
- Have completed six academic years of credit at an accredited college or university, of which at least three were completed at the University of North Texas Health Science Center at Fort Worth.
- 3. Have complied with all legal and financial requirements of the University of North Texas Health Science Center at Fort Worth.
- Have exhibited the ethical, professional, behavioral and personal characteristics necessary for practice as a physician assistant.
- 5. Have completed an exit questionnaire and returned to the Office of the Registrar a clearance check form.
- 6. Have attended the commencement ceremony at which the degree is to be awarded.
- Have met the following requisites and time limits: If a 7. student withdraws, decelerates, or is dismissed and later re-enters the program, or if a student is granted an extension beyond 36 months, that student must meet the requirements listed for the class with whom he or she will graduate. A student who has been dismissed due to poor academic progress, and later is readmitted to the program, has no more than 36 months from the date of re-entry to pass any academic course(s) that was (were) failed and must also complete any subsequent incomplete courses. A student dismissed due to a failing grade in a clinical practicum course, who later is readmitted to the program, has not more than 12 months from the date of re-entry to successfully complete the course that was failed and any subsequent incomplete courses. The maximum time limit for completing all graduation requirements is 72 months. Have met the following requisites and time limits: If a student withdraws, decelerates, or is dismissed and later reenters the program, or if a student is granted an extension beyond 36 months, that student must meet the requirements listed for the class with whom he or she will graduate. A student who has been dismissed due to poor academic progress, and later is readmitted to the program, has no more than 36 months from the date of re-entry to pass any academic course(s) that was (were) failed and must also complete any subsequent incomplete courses. A student dismissed due to a failing grade in a clinical practicum course, who later is readmitted to the program, has not more than 12 months from the date of re-entry to successfully complete the course that was failed and any subsequent incomplete courses. The maximum time limit for completing all graduation requirements is 72 months.

\* Students who do not fulfill all graduation requirements by the day of graduation will not be allowed to participate in commencement ceremonies without permission of the Dean (or designee). Only in unusual circumstances, and with approval of the Health Science Center President, will a degree be awarded in absentia. Students will not be con-

sidered graduates in any capacity until they have successfully completed all graduation requirements.

# Withdrawal

The Master of Physician Assistant Studies program adheres to the UNTHSC policy on course withdrawals. A student who withdraws from a course or fails to complete it within specified time periods will not be permitted to progress in the curriculum or to graduate.

Application for voluntary withdrawal must be made in writing. Except in rare and unusual circumstances, the application for withdrawal will be accompanied by a personal interview with the Program Director, the Associate Vice President for Student Affairs, and the Dean. Students who withdraw or fail to attend classes or clinical experiences without notifying the Registrar and/or the Dean and with-out completing the established withdrawal procedures within 30 days, will automatically be dismissed.

At the time withdrawal is granted, an entry will be made on the official permanent record indicating the academic standing of the student. "Withdrawal in good standing" will be recorded if the student is not on academic probation and has maintained a passing grade in each enrolled course during the semester in which the withdrawal is requested. "Withdrawal not in good academic standing" will be recorded if the student is on academic probation or has maintained a cumulative grade below passing in enrolled courses during the semester in which the withdrawal is requested.

Students must obtain and complete a Withdrawal Form from the Registrar before they can officially withdraw from the educational program. Students who do not complete the withdrawal process will not be entitled to an official withdrawal and consequently, can not be considered for readmission at a later date. Readmission is not assured unless it is a part of the final decision and/or agreement made by the withdrawing student, the Director of the PA Program and the Dean. This final decision and/or agreement will be in writing. Students who are granted readmission following withdrawal in good academic standing usually will re-enter at the beginning of the next academic year and must register for all courses scheduled during that academic year, including those previously completed and passed, unless stipulated otherwise in a written agreement with the Dean.

Students who withdraw, who are not in good academic standing may request readmission through regular the Admissions process. The admissions committee will evaluate the student's entire academic record and make a recommendation to the Dean. Any student who withdraws due to poor academic progress, re-enters the health science center and receives a failing grade in any course will be recommended for dismissal without opportunity for readmission .

# Other Policies Master's Project

All students enrolled in the Master of Physician Assistant Studies Program must successfully complete a master's project and receive a passing grade in order to graduate. Faculty will guide, monitor, and assess the quality of the work presented in this process. The Coordinator of PA Research Studies will determine and notify the student when successful completion of requirements has been achieved.

# Scheduling of Examinations

Examinations are given at a scheduled time and date. Course directors determine examination formats. Students must take examinations at the time they are originally scheduled. Failure to do so will result in a grade of "zero" on the missed exam unless other arrangements have been made with the course director. No examinations will be distributed after the first student has turned in a completed examination. All students who arrive later than the scheduled start time for the exam must fill out a "Late for Exam" form provided by the exam proctor and schedule a meeting with the Academic Coordinator immediately. Consistent patterns of late arrivals for exams may be considered unprofessional conduct and could result in dismissal from the program. No students will be exempt from taking final examinations.

# Make-up Examinations

A make-up examination is defined as an examination administered to a student in lieu of a regular course examination when the student has (1) arranged in advance to take an examination early or late, or (2) missed taking a regularly scheduled examination. Make-up examinations are given only in the case of an approved absence or documented medical excuse. Approval is required from the course director in order to authorize a make-up examination. Students who miss a scheduled examination without receiving approval by the course director to either take an early or late examination or to make up a missed examination will receive a grade of "zero" for that examination. Students who miss an examination are not permitted to participate in a post-exam review of that examination. To arrange for an early or late make-up examination, students must obtain and complete an excused absence form requesting a make-up examination. In the case of an early examination, the completed form must be submitted to the course director at least five (5) days before the date of the exam. This form documents the reason for the absence and the date the student requested for the make-up examination. In the case of a missed examination due to an emergency or illness, the student must obtain and complete an excused absence form to request a make-up examination within five business days after the missed examination. Approval of the excused absence and make-up examination is based upon the discretion of the course director and must be obtained from both the course director and Academic Coordinator. If approved, the make-up examination must be administered within seven (7) days following approval, except when the course director determines that additional time is needed.

# Use of Examinations Obtained from External Sources

UNTHSC takes reasonable actions to ensure the security of testing materials obtained from external sources.

Measures include, but are not limited to notifying students that:

- External testing materials are owned and copyrighted by outside entities and that any form of copying is prohibited.
- Students are not permitted to reproduce or distribute external testing materials that are owned and copyrighted by outside entities.
- Students are not permitted to distribute any external testing materials (or portions thereof) to students at other schools or to any other persons.

# Performance of Patient Care Related Activities

Achieving the educational goals of the program will call for students to become involved in activities at medical clinics and in hospital settings where direct patient care is provided. These activities typically include supervised direct patient care and access to patient care related information. Students are not permitted take the responsibility or place of qualified professional staff. Involvement in patient care is permitted only when authorized or by an assigned clinical preceptor or a faculty member. Under no circumstances are students permitted to write patient care orders independently or be assigned patient care activities that exceed those a graduate physician assistant would otherwise be directed to perform. Students may be asked to obtain and provide documentation indicating that they do not have conditions that would endanger the health and well being of patients before starting clinical rotations, including a Criminal Background Check and/or Drug Screen to complete all requirements for acceptance at a particular clinical site or hospital. Students must be able to demonstrate that their health and abilities enable them to meet the defined technical standards of the program, which are provided prior to admission. Students must be able to demonstrate their status related to infectious disease that could pose a threat to patient's well being. Students are required to obtain tuberculosis testing/screening annually.

# Confidentiality

Students are bound to commonly held confidentiality principles, state regulations and federal guidelines upheld in healthcare settings regarding patient information. Patient information MUST be maintained in confidence in accordance with institutional policy and that of affiliate institutions. Students may not release patient information to anyone outside of their clinical preceptor or a gualified faculty member unless they are instructed to do so by their clinical preceptor or gualified faculty member. In those cases where students are required to collect or produce documents for the purposes evaluating their performance, the student is required to remove or obliterate all potentially identifying patient information according to Federal HIPAA quidelines. Students may be required to sign a statement of understanding regarding patient confidentiality and complete additional training to insure compliance with affiliated institutional/hospital policies.

# Patient Notification of Student Status

Students must take reasonable steps to disclose their status as a "physician assistant student" while performing patient care related activities. Except in the operating room or other location where it would pose an infection or safety hazard, students are required to wear an identification badge at all times while on clinical rotations and when involved in patient care.

# Service Work

Students are not permitted to take the responsibility or place of professional or regular staff while serving in clinical experiences or clinical practica. Students may not accept payments, stipends, or other remuneration for services that they perform as a part of their educational program.

# Menial Tasking

Students may be asked to perform menial tasks such as transporting patients, collecting laboratory specimens, answering telephones, paging team members, or filing reports as long as they are not paid for performing these services and as long as the activities do not conflict with the student's overall learning experience.

# Supervision of Medical Services

PA students are prohibited from performing any medical services or function without appropriate supervision.

# Employment

Students are expected to give attendance to completion of assignments and rotation requirements priority over employment. Some assignments may call for the student to attend patient care activities at unusual or irregular hours or at places that are geographically separate from the main campus and/or their primary residence. Failure to meet course expectations due to employment conflicts may be cause for dismissal from the program.

# **Off-Campus Educational Activities**

Some clinical practica and educational experiences take place off-campus and outside the immediate vicinity of Fort Worth. Attempt is made to assist students in obtaining free or reduced-cost housing; however students are not guaranteed its availability and cannot be afforded special consideration due to employment concerns. Students should recognize that securing housing is a student responsibility. Assistance with locating housing is a service provided for students and is not a program obligation. At no time should the university or PA program be considered responsible for paying student housing at clinical rotation sites.

# **Course/Instructor Evaluation**

Each student is responsible for providing constructive evaluation of each course, clinical practicum and instructor in the curriculum within five (5) class days after each course ends. This responsibility is met by participation in the course evaluations and as defined in administrative policy S/TCOM/Acad-36; if the responsibility is not met, the student will be given an "I" (incomplete) for the course until such evaluation is completed. All evaluations must be current before students can register for the next semester or graduate.

# Academic Honors

It is a health science center tradition to recognize its highest scholars and promote academic excellence. Students may be awarded "Honors" upon graduation if their overall grade point average is greater than or equivalent to 3.51 on a 4.0 scale. No more than 20% of a single PA graduating class will be awarded "Honors" at graduation.

The Dean's List is established to rec-ognize academic excellence when the student achieves a semester grade point average of 3.51 or greater for a se-mester that is primarily didactic. Due to the variable nature of clinical practica, Dean's List recognition is not awarded for clinical practica. A student who has been placed on pro-bation for any reason during their enrollment is not eligible for Dean's List recognition. Other special awards may be utilized by the PA program to recognize exceptional aca-demic, clinical and leadership performance by a student. Special awards are not annotated on the student's official transcript. No graduate who has failed a course or rotation, or who has not been enrolled as a full-time student, or who has been placed on academic or disci-plinary probation during their enrollment can receive a de-gree with honors.

# Transcripts from UNTHSC

The term "academic transcript" refers to a copy of the official permanent record of a student's approved academic course work, including academic marks, scholarships and degrees. Students may obtain copies of their transcripts by submitting written requests to the Office of the Registrar. The first copy of the TCOM transcript is free. A fee is charged thereafter for each official transcript. A fee is also charged for each copy of an undergraduate transcript in a student's file. Alteration of academic records or transcripts with the intent to use such a document fraudulently is a crime punishable by law. The penalty is a fine of not more than \$1,000 and/or confinement in the county jail for a period not to exceed one year. Appropriate payment of tuition and fees must be made before a transcript will be released.

# Dual Degree Program

The University of North Texas Health Science Center offers several dual-degree programs within the institution. Because each degree program requires the student to follow a separate curriculum in two schools, each school will have administrative authority over its specific degree program.

# **Application Procedures**

To apply to the DO/PhD, DO/MS or DO/MPH degree programs, students must first apply to the Texas Medical and Dental Schools Application Service according to the application procedures in this catalog. Applicants should indicate on the supplemental application the dual-degree program in which they are interested. Dual-degree applicants are reviewed by the Dual-Program Admission Committee. It is highly recommended that applicants for the dual-degree programs apply early in the application season.

For more information on the DO/MS or DO/PhD programs, please contact the graduate school office. Contact the School of Public Health admissions office for more information on the DO/MPH program.

# Dual Degrees with the Graduate School of Biomedical Sciences

# DO/PhD (Medical Scientist Training Program) DO/ MS

The Graduate School of Biomedical Sciences participates in the DO/PhD and DO/MS programs with the Texas College of Osteopathic Medicine (TCOM). Typically, the DO/PhD program will be six to seven years in length. The DO/MS program is typically five years in length. Students may pursue a DO/PhD through the Medical Scientist Training Program (MSTP), which guarantees funding from the Graduate School of Biomedical Sciences during Block 2 of the program, as well as payment of graduate tuition and fees. Support may be available during other blocks of the program through TCOM.

Students may choose from a wide range of disciplines, including cell biology and genetics, biochemistry and molecular biology, microbiology and immunology, physiology, and pharmacology and neuroscience. Additional information on specific programs is available from the Graduate School of Biomedical Sciences.

# **Application Procedures**

An applicant to the MSTP program must first apply to the Texas Medical and Dental Schools Application Service. Applicants should indicate the dual degree program in which they are interested on the application. If invited for interview, applicants will participate in three interviews, rather than the standard two for applicants to the DO program. Applications are then processed through a dual program admissions committee.

Individuals who become interested in pursuing the DO/ PhD after gaining acceptance into either TCOM or the Graduate School of Biomedical Sciences must make formal application to the school in which they are not already enrolled. Procedures are in place to streamline this process by sharing information already in institutional records. Applicants who decide to pursue the DO/PhD after gaining acceptance to either TCOM or the Graduate School of Biomedical Sciences may not be considered for the MSTP.

Applicants to the DO/MS program may apply either using the dual degree admissions process described above or by applying to each school separately. DO/MS applicants will not be considered for the MSTP.

# Formats

The general formats of the dual degree programs are explained below. While the formats may be regarded as standard working formats, deviations from these formats that meet the curriculum requirements are also acceptable. A degree plan is established by the student's major professor and advisory committee and filed in the graduate office.

# DO/PhD Format

Block 1 consists of the pre-clinical years for the DO degree program. During Block 1, students will complete the first two years of the DO curriculum and will pass Part 1 of the College of Osteopathic Medical Licensing Examination (COMLEX). During this block, students will register only in TCOM.

An exception to this rule can be made if students wish to register for graduate courses which are not part of the DO curriculum during this block. In this case, students will register for such graduate courses through the Graduate School of Biomedical Sciences. Students must have permission from the TCOM Associate Dean for Academic Affairs prior to registering for graduate courses.

During Block 1, students will select a graduate advisory committee and will file an approved graduate degree plan of at least 90 semester credit hours (SCH) with the graduate school. DO/PhD students are credited 30 SCH of advanced standing toward a PhD for the basic science didactic course work required in the DO curriculum.

Block 2 consists of at least two years dedicated to graduate study.

During Block 2, students are expected to complete all course work required for a PhD degree, complete the requirements for advancement to candidacy, file an approved dissertation research proposal and make significant progress toward the completion of their dissertation research. It is not uncommon for students to continue research and complete the dissertation during Block 3.

Block 3 students will complete required clinical rotations and electives and will pass Part 2 of the COMLEX. During this block, students may also continue work toward the doctoral dissertation.

At the end of Block 3, students are expected to have

completed the curriculum required for a DO degree and 60 additional SCH of graduate courses under the Graduate School of Biomedical Sciences as required for the second degree, including the dissertation. Following completion of the curriculum required for both degrees, students are awarded a DO degree from TCOM and a PhD from the Graduate School of Biomedical Sciences.

# DO/MS Format

Block 1 consists of the pre-clinical years for the DO degree. During Block 1, students will complete the first two years of a DO curriculum and will pass Part 1 of COMLEX. During this block, students will register only in TCOM. An exception can be made if students want to register for graduate courses that are not part of the DO curriculum during this block. In this case, the student will register for such graduate courses through the Graduate School of Biomedical Sciences. Students must have permission from the TCOM Associate Dean for Academic Affairs prior to registering for graduate courses.

During Block 1, students will select a graduate advisory committee and will file an approved graduate degree plan of at least 30 semester credit hours (SCH) with the graduate school. DO/MS students are given up to 18 SCH of advanced standing toward an MS degree for the basic science didactic course work required in the DO curriculum.

Block 2 consists of at least one year dedicated to graduate study. During Block 2, students are expected to complete all course work required for the MS degree, file an approved thesis research proposal and make significant progress toward the completion of their thesis research.

Block 3 students will complete the required clinical rotations and electives and will pass Part 2 of the COMLEX. During this block, students may also continue work toward their master's thesis.

At the end of Block 3, students are expected to have completed the curriculum required for a DO degree and to have completed at least 12 additional SCH of graduate courses in the Graduate School of Biomedical Sciences as required for the second degree, including the research thesis. Following completion of the curriculum required for both degrees, students are awarded a DO degree from TCOM and a MS from the Graduate School of Biomedical Sciences.

# Costs, Financial Obligations and Assistance

DO/PhD and DO/MS students pay standard medical school tuition and fees during each block that they are enrolled in TCOM. They also pay the hourly tuition rate and fees for all courses not required for the DO degree, i.e., the credit hours required for the graduate degree. Non-Texas residents pursuing a DO/PhD are assessed tuition at the instate rate for both medical and graduate school.

The health science center will provide financial support to students chosen for the MSTP by the dual program admissions committee to seek the DO/PhD. This includes a fellowship in an amount sufficient to pay all graduate tuition costs during Block 2 and a graduate assistantship during that block. Support may be available during other blocks, as well.

Students who are not selected to participate in the MSTP often receive funding during Block 2 from other sources, including research grants, departmental assistant-ships and other departmental funds. All dual degree program students are eligible to apply for financial aid.

# Master of Science in Clinical Research and Education

The Master of Science in Clinical Research and Education is for students who have completed or are completing graduate level training in a clinical health care discipline who want to advance osteopathic medicine and medical principles through teaching and/or research. The degree is designed to build on students' clinical skills by fostering the development of additional skills in educational methodology and research techniques. While the degree can help any student planning a clinical career by helping them to be more sophisticated consumers of the latest research, it is designed to be of particular value to students planning a career in graduate medical education or in academic medicine.

Training focuses on producing clinicians who can enhance the resources of the osteopathic medical profession in the development of clinical research and teaching of osteopathic manipulative medicine (OMM). Therefore, these principles and techniques provide the focus and foundation of this program.

Applications are accepted from current students and from residents and clinicians who have already completed their primary training.

# *Dual Degree with the School of Public Health*

# DO/MPH Training Program

The primary goal of the DO/MPH program is to provide clinical professionals with specialized public health training to develop, integrate and apply culturally competent social, psychological and biomedical approaches to the promotion and preservation of health. Participation in this program is subject to approval by the TCOM Associate Dean for Academic Affairs.

There are two options in the DO/MPH program. The first option is to extend the period for completion of the public health and medical degrees to five years by registering for the majority of the public health courses between Year 2 and Year 3 of the medical school curriculum.

The second option is to complete the MPH degree requirements during the four years of medical education in TCOM. In order to receive an MPH degree at the time of medical school graduation, students must enter the MPH program and take courses (at least 9-12 semester credit hours) during the summer prior to matriculation into medical school and enroll in one School of Public Health evening course during each semester of Year 1 and Year 2 of medical school. Contact the School of Public Health at 817-735-2252 for more information on the MPH curriculum.

# Texas College of Osteopathic Medicine

# ACADEMIC INFORMATION

2006-2007 CATALOG

# **Financial Aid**

The University of North Texas Health Science Center offers scholarship and loan programs to assist students in meeting the costs of financing a medical education. Although financial aid is available for eligible students, it should be considered a supplement to a student's own financial resources.

The focus of the Financial Aid Office is customer service and the prompt delivery of student funds. Counselors take students step-by-step through the application process to ensure that students receive the best funds available and that details of all programs are understood. While financial aid is heavily regulated, the staff strives to help students navigate this complex path in a professional and courteous manner.

# Student Eligibility

To be considered for financial assistance, a student must meet the following eligibility criteria:

- Certify that he/ she does not owe a refund on any grant or loan, is not in default on any loan or has made satisfactory arrangements to repay any defaulted loan, and has not borrowed in excess of the loan limits on any federal programs
- Register with the Selective Service if required to do so
- Maintain satisfactory academic progress
- Use all funds received as financial aid for educational purposes only
- Must be a U.S. citizen or eligible non-citizen

# Applying for Financial Aid

- New applicants should complete a Free Application for Federal Student Aid (FAFSA) electronically at <u>www.fafsa.ed.gov</u>. A computer with access to a printer and the previous tax year's information are required. For continuing students you can complete a renewal application with your pin number.
- All students must complete a student questionnaire located on the financial aid website at <u>http://</u> www.hsc.unt.edu/departments/financialaid/
- 3. The Office of Financial Aid does not have an application deadline. However, it is highly recommended that applications be submitted as early as you can since some funding is limited. Applications should be received no later then April 1st to have aid here on-time. The Office of Financial Aid cannot guarantee that funds will be available by the start of class if applications are received past April 1st. If aid is not here on time then students should be prepared to pay for own expenses and wait until aid dollars arrive to be reimbursed.
- Students selected for verification will be required to provide additional documentation and financial aid forms. If the selected data is incorrect, the processing time may increase.
- 5. Take adequate time to complete the FAFSA. Read and answer all questions carefully and accurately. The ad-

ditional time spent will enhance and ensure a successful application process.

 Schedule an appointment with a financial aid counselor to discuss eligibility requirements, verification, problems, budgeting of resources, or loan applications. Call (817) 735-2505 or (800) 346-8266.

The Office of Financial Aid is located in the Division of Student Affairs on the second floor of the Educational and Administration building (EAD-247)

# Student Financial Aid Counseling

Individual student counseling is available and encouraged. Counselors are available to discuss budgeting and types of financial aid awards. Students receiving federal loans are required to receive in-person counseling before the release of the first disbursement of their first loan.

# Student Budgets

Student budgets are developed within federal guidelines and must meet the approval of the Texas Higher Education Coordinating Board. These budgets are re-evaluated annually and may or may not change depending on require -ments by federal law. Student budgets are based on the following expenses for the student only (does not include spouse or other dependents):

- Tuition and fees
- Books and supplies
- Room and board
- Transportation
- Personal or Miscellaneous expenses
- Health Insurance

Allowances for those students with dependents requiring dependent care and allowances for handicapped students may be permitted for students meeting specific requirements. In addition, students with unusual or extenuating school-related circumstances that may require special consideration should contact the Financial Aid Office promptly. In some instances, students may be required to supply additional information for a complete evaluation of a request.

Students applying for financial aid must complete the Free Application for Federal Student Aid (FAFSA). A new application is required for each school year in which aid is needed .

# Federal Loan Programs

Students who complete the FAFSA and meet all general eligibility requirements as outlined for each program may apply for federal financial aid. In addition, most aid programs require that the recipient adhere to academic and/or financial criteria in order to maintain eligibility. Some programs have limited funds; therefore, student files that are completed first are considered first. Major federal programs

#### FINANCIAL AID

available can include:

- TPEG Grant (limited in funds and only available to 3 and 4 year medical students)
- Federal Work Study
- Federal Perkins Loans ( limited on funds)
- Scholarships for Disadvantage Students
- Federal Subsidized Loan
- Federal Unsubsidized Loan

We encourage all students to apply early since some financial aid is limited. In addition, students may apply through the health sci-ence center's Financial Aid Office for various state, institu-tional and private scholarship/loan programs. Students may also apply directly to private foundations for scholar-ships also apply directly to private foundations for scholar-ships and loans. Several programs have individual selec-tion criteria and various award limits. Contact the Financial Aid Office for more information. Also students interested in armed forces programs should contact their local recruiter or a recruiter in the Dallas/ Fort Worth metroplex.

# **Credit Eligibility**

Due to the demanding course schedule, holding a parttime job may not be possible. This creates a greater dependence on financial aid to cover living expenses. Some students discover a need to borrow additional funds beyond what the Stafford programs will allow. The source of these additional funds is usually a private alternative educational loan.

Unlike Stafford loans, the government does not guarantee alternative loans. Therefore, lenders usually review a student's credit history before granting an alternative loan. Educational loan defaults, bankruptcies, charge-offs, foreclosures, judgments, liens or an excess of slow payments could damage the chances of receiving the alternative loans necessary to cover all educational and living expenses that a student is responsible for while attending medical school.

A good credit history is important to ensure that any student is able to take full advantage of all funding options available through financial aid.

# Insurance for Alternative Loans

Unlike Stafford loans, most alternative loans do not include a death/disability clause. This means that most alternative loans are not forgiven in the event of death or total disability. We recommend that any student planning to borrow money from an alternative loan program consider securing adequate insurance coverage for the loan.

# **Campus Resources**

# Housing

The health science center does not provide on-campus student housing. However, students will find a variety of housing opportunities in the area. Every student is responsible for making his or her own housing arrangements.

# Recreation Facilities-Founder's Activity Center

The Founders Activity Center, located on the north side of the campus, and is open seven days a week to students, faculty and staff. The center features aerobic classes, regularly scheduled recreational sports, a multipurpose outdoor court, and recreational equipment. Cardiovascular exercise equipment is also available, as well as free weights and weight machines. Exercise and nutrition programs can be tailored to the individual by the center's health promotion manager. For more information and a current schedule of activities, please visit their website at: www.hsc.unt.edu/fac or contact the health promotion manager at 817-735-2209.

# **Food Service**

Snack food is available from various on-campus vending machines and the UNTHSC gift shop located on the second floor library lobby. Lunch is sold daily in the Stairwell Café, located on the first floor of the library (LIB).

# **Campus Police**

The UNT Health Science Center Campus Police Department operates 24 hours per day, seven days a week. Campus Police officers are fully licensed peace officers vested with all the powers, privileges, and immunities of peace officers in the State of Texas. They are authorized to function as the local law enforcement authority in all counties in which property is owned, leased, rented or otherwise under the control of the health science center.

In compliance with the Jeanne Clery Campus Security Policy and Crime Statistics Reporting Act and the 1998 amendments to the Higher Education Act, a Campus Police Crime Log, containing all reportable crimes is maintained and made available to the general public. Such crimes are logged and open to public inspection within two business days of the report. Exceptions to disclosure of statistics will be made to protect ongoing investigations and victims of sensitive crimes. The non-emergency phone number for the campus police is 817-735-2210. For emergencies, please call 817-735-2600 or ext. 2600 from any campus phone!

# Motor Vehicle Registration

People who operate motor vehicles and bicycles on campus must comply with the Texas Uniform Traffic Code and the published center regulations regarding vehicle and bicycle use, parking, display of decals, and penalties for violation. More details are available from <a href="http://students.hsc.unt.edu">http://students.hsc.unt.edu</a> in the parking policies of the

Student Handbook.

# ID Cards

Health science center identification cards are issued during registration. These must be worn at all times while the student is on campus, or, if applicable, on preceptorships and on clinical rotations.

The identification card is void upon termination or interruption of enrollment and when not properly encoded. Fraudulent use of an identification card subjects the user to a fine of \$2,000 and up to one year in jail (Class A Misdemeanor). Anyone who uses the identification card to give false information to a police officer is subject ot a fine of \$2,000 (Class C Misdemeanor).

Replacement identification cards may be purchased for \$25. Please contact Biomedical Communications at 817-735-2470 for procedures and more information. A stolen card should be reported to Campus Police.

# Liability

The health science center is not responsible for, and does not assume any liability for loss of or damage to personal property. Students may wish to provide personal insurance coverage for their possessions on campus.

# Health Services

Health care services are available to students through the UNT Health Science Center's Student Health Clinic in the Patient Care Center on the northwest corner of campus. The student is responsible for all appropriate fees, and proof of insurance must be provided. Referrals to specialty clinics must be approved by Student Health Services or the student's primary care physician. For more information, please contact the Student Health Clinic at 817-735-2228.

# Student Health Insurance

It is compulsory for all students carry medical and hospitalization insurance while enrolled at the health science center. Proof of insurance in the form of a signed verification form must be completed prior to initial registration and enrollment. Insurance coverage must remain in effect throughout the duration of enrollment.

Although insurance may be purchased from any insurance carrier, a group student health insurance plan is offered by a non-university affiliated carrier for enrolled students. Application forms are available in the Office of Student Affairs office. To review official health and safety policies, please refer to the Student Handbook located on the web at <u>http://students.hes.unt.edu</u>.

# **Veterans Benefits**

The health science center is approved by the Texas Workforce Commission for the training of men and women who have served in the armed forces. Assistance is provided to students who are on active duty or are veterans. Veterans should contact the Office of the Registrar for the appropriate forms to establish eligibility for assistance. The completed forms and a copy of Form DD-214 must be forwarded to the Office of the Registrar.

Veterans must maintain the minimum passing grade for their academic program to remain eligible to receive veterans' benefits. The Office of the Registrar can answer questions on veterans' benefits.

# Policies Pertaining to Students

# **General Administrative Policies**

This catalog contains official academic and administrative regulations. General policies that apply to all programs are in this section of the catalog; specific policies for each program are in the respective sections of this catalog. Academic policies and scholastic regulations also are presented in other official health science center documents and specific program publications.

Each student enrolled at UNT Health Science Center is responsible for knowing current academic policies and scholastic regulations, general and specific requirements, and operational policies that apply to registration and instruction.

The health science center reserves the right to amend or add to the academic policies and scholastic regulations at any time, provided that such changes or additions are intended to improve the quality of education and are introduced in a fair and deliberate manner with appropriate notice provided to all students affected by the changes.

# Immunizations

The Texas Department of Health requires all students in higher education institutions to show proof of immunizations before registration. Any validated document of immunization presented by a student is acceptable provided that it shows the day, month and year when each immunization was received. Proof of required immunizations must be submitted prior to matriculation.

Proof of immunization is not required for individuals who submit an affidavit or certificate signed by a physician licensed to practice in the United States stating that, in the physician's opinion, the required immunization would be injurious to the health and well-being of the student or any member of his or her family or household. Unless a lifelong condition is specified, the affidavit or certificate is valid for one year from the date signed by the physician and must be renewed every year for the exclusion to remain in effect.

The Texas Department of Health requires that certain immunization conditions be met. All students born after January 1, 1957, who are enrolled in health-related courses in medical care facilities, must show proof of two doses of measles vaccine, one dose of mumps vaccine or proof of immunity to these diseases; and two doses of chicken pox vaccine. Students who have had chicken pox may provide a written statement from their physician or a parent.

This is the only disease where a written statement from a parent can be considered proof of immunity. All students enrolled in health-related courses must show proof of one dose of tetanus/diphtheria vaccine within the past 10 years. All students enrolled in health-related courses must show proof of either one dose of rubella vaccine administered on or after the first birthday or serologic proof of rubella immunity. All students, residents and interns will receive a complete series of hepatitis B vaccine or show proof of serologic immunity. All students will be skin tested for tubercu-

losis using the two-step testing procedure in accordance with Section X of the Tuberculosis Control Plan Policy 96.001.26 of UNT Health Science Center. This test will be done during the first month of classes.

Prospective students may be given provisional enrollment of up to one semester to attend classes while getting the required immunizations or documentation as long as no direct patient care is involved.

Student health care providers cannot be provisionally enrolled without the receipt of at least one dose of the MMR vaccine if direct patient contact will occur during the provisional enrollment period.

For additional information regarding student health issues (meningitis, needle stick, etc) please visit <u>http://</u> www.hsc.unt.edu/education/studenthealth/default.cfm.

# Hospitalization Insurance

All students are required to provide their own health insurance while attending UNT Health Science Center. Prior to registration, each student is required to show proof of health/hospitalization insurance or sign an acknowledgement that they have health insurance coverage and will maintain it for the duration of their enrollment. Recognized proof of coverage is a photocopy of the policy naming the student as insured or a letter from the insurance company stating that the student is insured for hospitalization care. Proof of coverage must be submitted to the Office of Student Affairs.

# Student Rights While Assuring Patient Care

The institution will consider the impact of a caregiver's personal cultural values, ethics and religious beliefs as related to all services provided. However, in no instance will the mission of the institution be compromised. In accordance with applicable laws, treatment and care of our consumers will be provided to persons in need without regard to disability, race, creed, color, age, gender, religion or national origin. For the complete policy as it pertains to students of the health science center please see Human Resource Policy 5.13 under policies and Procedures on the institution's home page at <u>www.hsc.unt.edu</u>, or in the human resources policy manual located in each department.

# Family Educational Rights and Privacy Act

The Family Educational Rights and Privacy Act (FERPA), 20 U.S.C. 1232G, grants students in institutions of higher education the right of access to their educational records with the exception of confidential letters and statements of recommendation that the student has waived the right to inspect.

Before disclosing any personally identifiable information, except directory information, the health science center must obtain written consent from the student unless the disclosure is allowed by law. The Family Educational Rights and Privacy Act consider certain information to be "directory information," which is subject to disclosure without prior consent from the student. Directory information relating to students includes the following: the student's name, address, telephone listing, date and place of birth, hometown, major field of study, participation in officially recognized activities and sports, classification, degrees and awards received, the most recent educational agency or institution attended by the student, and dates of attendance.

Students who do not want all or part of their directory information to be released must submit a written requested to the Office of the Registrar during the first 12 days of the semester. Forms for submitting the written request to withhold directory information are available in the Office of the Registrar.

Students have a right to request amendment to their educational records to ensure their accuracy. Students also have the right to file a complaint with the U.S. Department of Education concerning alleged failures by the health science center to comply with the requirements of the Family Educational Rights and Privacy Act.

# Student Conduct

The health science center's primary concern is the student. It attempts to provide an environment that is conducive to academic endeavor, social growth and individual self-discipline for all students. Enrollment at the health science center is considered implicit acceptance of the rules, regulations and guidelines governing student behavior promulgated by the institution, and the student is responsible for being aware of these requirements. In addition, all students are expected to know and obey the requirements of all federal, state, and local laws. Any student who violates a provision of those laws is subject to disciplinary action, including expulsion, notwithstanding any action taken by civil authorities because of the violation. The health science center reaffirms to each student the privilege of exercising the student's rights of citizenship under the Constitution of the United States. Special care is taken to ensure due process and to identify the defined routes of appeal when students feel their rights have been violated. For complete policy information, consult the Student Code of Conduct in the Student Handbook or the health science center web site at www.hsc.unt.edu.

# **Fiscal Policies**

UNT Health Science Center is a state-supported institution subject to state laws. Students have an option to pay tuition and fees by installment. All other financial obligations to the college must be paid in advance. Tuition and fees are subject to change by the Board of Regents, the Texas Legislature or legal rulings of the Texas attorney general.

# **Tuition Refund**

A tuition refund is based on the date of withdrawal. Upon official notification of withdrawal by the registrar, the Accounting Office will return the appropriate refund to the student or to the applicable federal loan program. Payment plan fees, late fees and ID card fees are not refundable. By action of the Board of Regents, no part of the fees or tuition can be refunded to students, who withdraw, for any cause, after the 20th day of each semester, except for those students who receive financial aid. Those students will receive a pro-rated refund based on the number of weeks remaining in the semester, provided they leave before the 60-percent-completion point of the semester. After the 60-percent-completion point, the schedule for refunds is 80 percent first week, 70 percent second week, 50 percent third week and 25 percent fourth week.

# Respect for Diversity

The Nondiscrimination/Equal Employment Opportunity and Affirmative Action policy affirms the requirement for every member of the UNT Health Science Center community to comply with existing federal and state equal opportunity laws and regulations.

UNT Health Science Center is committed to the philosophy of a multicultural environment. The institution prohibits harassment based on race, gender, disability, age, national origin, religion, veteran status or lifestyle.

The health science center has long been an open, tolerant and democratic institution, proud of its commitment to personal and academic excellence, but unpretentious in the atmosphere of its campus in its willingness to accept all members of the health science center community on their value as human beings.

The increasing diversity of UNT Health Science Center community is one of the institution's greatest strengths. Differences of race, religion, age, gender, culture, physical ability, language, nationality and lifestyle make it a microcosm of the nation as a whole, reflecting the values of our pluralistic society.

As an educational institution, UNT Health Science Center is committed to advancing the ideas of human worth and dignity by teaching respect for human beliefs and values and encouraging open discussions. Hatred, prejudice or harassment of any kind is inconsistent with the center's educational purpose.

UNT Health Science Center is strongly committed to the ethical principle that every member of the community enjoys certain human and constitutional rights, including the right to free speech. As a community of scholars, the health science center also is dedicated to maintaining a learning environment that is nurturing, fosters respect, and encourages growth among cultures and individuals represented here. Individuals who work, study, live and teach within this community are expected to refrain from behaviors that threaten the freedom and respect every individual deserves.

# Sexual Harassment

A primary objective of UNT Health Science Center is to provide an environment in which faculty, staff and students may pursue their careers and studies with a maximum of productivity and enjoyment.

Harassment of students on the basis of gender is a violation of Section 106.31 of Title IX of the Education Amendments of 1972. Harassment of health science center employees on the basis of gender is a violation of Section 703 of Title VII of the Civil Rights Act of 1964 and the Texas Commission on Human Rights Act. Sexual advances, requests for sexual favors and/or other verbal or physical conduct of a sexual nature constitutes sexual harassment.

It is the policy of the health science center to maintain a workplace and a learning environment free of sexual harassment and intimidation. Behavior or conduct that interferes with this goal is not condoned or tolerated.

# Americans with Disabilities Act

UNT Health Science Center does not discriminate on the basis of an individual's disability and complies with Section 504 and Public Law 101-336 (Americans with Disabilities Act) in its admissions, accessibility, treatment and employment of individuals in its programs and activities.

UNT Health Science Center provides academic adjustments and auxiliary aids to individuals with disabilities, as defined under the law, who are otherwise qualified to meet the institution's academic and employment requirements. For assistance contact the Equal Employment Opportunity Office at the health science center at 817-735-2357.

# Crime Awareness and Campus Security Act of 1990

The Crime Awareness and Campus Security Act of 1990 as amended requires that colleges publicize campus crime statistics and interim reports of serious crimes. These publicized statistics are meant to warn students, employees, and applicants of the prevalence of campus crime. Employees and students must be given interim crime reports which include statistics on murder/non-negligent manslaughter, negligent manslaughter, robbery, aggravated assault, burglary, motor vehicle theft, arson, arrests for weapons law violations, arrests for drug abuse violations, arrests for liquor law violations, disciplinary referrals for weapons, drugs, and liquor that were not arrests, sex offenses forcible, and sex offenses non-forcible. The annual report must also describe how to report crimes and emergencies on campus. The purpose of this act is to educate the campus community about security. Crime statistics for the UNT Health Science Center are available on the Campus Police website: http://www.hsc.unt.edu/departments/ police/unthscpd.htm

#### Substance Abuse & Self Reporting

The Health Science Center does not condone the abuse of alcohol or illegal drugs. Its administrative policies, in accordance with Texas state law, provide the penalty of suspension or dismissal of any student who abuses alcohol or uses illegal drugs on property owned or affiliated with the Health Science Center. However, the Health Science Center recognizes that students may develop substance abuse problems that can be treated successfully before critical incidents occur (e.g., arrests, usage on campus property, or intoxication in the classroom or health professions setting). Therefore, the Health Science Center encourages students who have developed substance abuse problems to voluntarily identify themselves and to seek immediate treatment. Complete listings of all health science center policies related to substance use or abuse can be found on the institutions web page www.hsc.unt.edu on the Human

# Resource Services Policy page and in the on-line Student Handbook.

This catalog is an official bulletin of the University of North Texas Health Science Center's Texas College of Osteopathic Medicine and is intended to provide general information. Information contained herein was compiled before July 2005 and is accurate as of that date.

The health science center reserves the right to make changes at any time to reflect current board policies, administrative regulations and procedures, amendments by state law and fee changes. Information provided by this catalog is subject to change without notice. The institution is not responsible for any misrepresentation or provisions that might arise as a result of errors in preparation.

# Administration, Officers & Staff

### **Board of Regents**

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Chancellor Lee Jackson, MPA

Administration

Daniel Perugini, DO Interim President and Executive Vice President

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Senior Vice President, Finance and Administration

#### J. Warren Anderson, EdD

Acting Senior Vice President, Academic Affairs, Dean, School of Health Professions, Chair of Education and Director, Biomedical Communications

Adela N. Gonzalez, MPA, PhD Vice President, Community Affairs and Institutional Diversity

**Daniel M. Jensen, MS** Vice President, Governmental Affairs and Associate Vice Chancellor for Governmental Affairs, UNT System

Randall Jones Vice President, Practice Operations and Chief Administration Officer

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Michael Clearfield, DO Associate Dean, Clinical Research

Bruce Dubin, DO, JD Associate Dean, Academic Affairs

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Jamboor K. Vishwanatha, PhD Associate Dean, Graduate School of Biomedical Sciences

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**Robert Kaman, PhD, JD** Assistant Dean, GSBS, Director of Outreach and Institutional Compliance Officer

Michael Martin, PhD Assistant Dean, Preclinical Education

Frank Papa, DO, PhD Assistant Dean, Curricular Design and Educational Technologies

Tim Strawderman, PhD, MPH Assistant Dean, School of Public Health

Administrative Staff Joel Daboub Director, Admissions and Outreach, Texas College of Osteopathic Medicine

Stephen Barrett Director, Facilities Management

Michael Brown Chief of Police

Betty Belton Registrar

Kay Colley Manager, News and Information

Carla J. Lee

Director, Biomedical Sciences Admissions and Services

TCOM CATALOG

Henry R. Lemke, PA-C, MMS Director, Physician Assistant Studies

Patti Lloyd Director, Office of the President

Robert McClain, PhD Director, Technology, Development and Commercialization

M. Susan Motheral, PhD Director, Strategic Evaluation and Analysis

Lane Nestman Director, Purchasing

**Robert Nimocks** Executive Director, Information Technology Services and Chief Technology Officer

Dennis Shingleton, MS, MBA Chief of Staff, TCOM

Douglas Shriner Director, Financial Aid

James Sims, PhD Safety Officer

# **Cell Biology and Genetics**

The Department of Cell Biology and Genetics is committed to excellence in teaching, research and service. The mission of the department is to become leaders in modern cell biology and genetics research and to provide excellent innovative teaching in the anatomical sciences for physician, biomedical science and physician assistant students. Our faculty do cutting-edge research in areas such as glaucoma and cataract biology, diabetes, DNA damage responses and apoptosis, stem cell biology, growth factors and ion channels, cell signaling, yeast genetics and cellular and molecular imaging. Our faculty is also nationally recognized for innovative techniques in anatomy education including gross anatomy, histology, embryology and neuroanatomy. The department also houses the Microscopy Imaging Facility for the health science center. Our master's and Ph.D. graduate programs focus on cell biology and forensic genetics and offer students outstanding opportunities in research and teaching.

# Faculty Roster

#### Wordinger, Robert J., PhD

Professor and Chair BS Pennsylvania State University MS and PhD Clemson University

#### Agarwal, Neeraj, PhD

Associate Professor BS Panjab University MS National Dairy Research Institute PhD The Postgraduate Institute of Medical Education and Research

#### Cammarata, Patrick R., PhD

Professor BS State University of New York at Stony Brook PhD Hunter College, City University of New York

Garner, Margaret H., PhD Associate Professor BS Marietta College MS and PhD Indiana University

# Gryczynski, Ignancy, PhD

Professor (Joint appointment with Molecular Biology and Immunology) MS University of Gdansk, Poland PhD University of Gdansk, Poland

**Gryczynski, Jygmunt, PhD** Professor (Joint appointment with Molecular Biology and Immunology) MS University of Gdansk, Poland PhD University of Gdansk, Poland

# Jiang, Yi Wei, PhD

Associate Professor BS University of Science and Technology of China, Heifei, China PhD University of Utah

Reeves, Rustin, E. PhD Assistant Professor BS Texas A&M University

PhD University of North Texas Health Science Center Graduate School of Biomedical Sciences

Roque, Rouel S., MD Associate Professor BS and MD University of the Philippines

#### Rosales, Armando, A. MD

Assistant Professor BS University of Santo Tomas College of Science (Philippines) MD University of Santo Tomas Faculty of Medicine and Surgery (Philippines)

#### Routh, Robert E., PhD

Assistant Professor BS Southwest State University MS and PhD Louisiana State University Health Science Center

Sheedlo, Harold, J. PhD Assistant Professor BS and MA Northern Michigan University PhD Memphis State University

Siede, Wolfram, PhD Associate Professor PhD University of Frankfurt in Germany

### Affiliated Faculty

#### Adjunct Professor Clark, Abbot, F., PhD

Adjunct Associate Professor Pang, lok-Hou, PhD Ranelle, Brian, DO

#### Adjunct Assistant Professor Collier, Robert, PhD

McCartney, Mitchell, PhD Shephard, Allan, PhD **Emeritus Faculty** Schunder, Mary, PhD Associate Professor Emeritus

# Education

The Department of Education provides leadership in and support for a variety of educational programs and activities. The department includes the Division of Ethics, the Division of Academic Information Services and the Division of Faculty Development. Research in the Department of Education fo-cuses on the educational process, the applica-tion of educational technology and improving program effectiveness. The department also maintains an evaluation database on the courses, faculty, preceptors and teaching sites used by the health science center. In addition to conducting program and student evaluations of health science center faculty, the department produces routine reports assessing the operation of the medical curricu-lum.

#### Faculty Roster

#### Anderson, J. Warren, EdD

Acting Senior Vice President, Academic Affairs, Dean, School of Health Professions, Chair of Education and Director, Biomedical Communications BS Iowa State University MS San Diego State University

MS San Diego State University EdD Indiana University

#### Alexander, Jerry, PhD

Director, Academic Information Services Associate Professor BS Pennsylvania State University MEd and PhD University of Southern Mississippi

#### Budd, Michael L., PhD

Assistant Professor BA Albion College MS University of Michigan PhD Michigan State University

#### Martin, Michael W., PhD

Assistant Professor and Assistant Dean for Academic Affairs BS Colorado State University PhD University of Texas at Houston

#### Martin, Roy S., DMin

Assistant Professor, Ethics BS University of Memphis MDiv and DDiv Brite Divinity School, Texas Christian University

Motheral, M. Susan, PhD, MBA Assistant Professor BA Grinnell College

PhD Duke University MBA Southern Methodist University

# Affiliated Faculty

Adjunct Associate Professor Bowling, John R., DO Cunningham, Linda F., MD

#### **Adjunct Assistant Professor**

Baker, Dann, MDiv LeMaistre, William, JD Reed, Linda, PA

Adjunct Instructor

Dansereau, Margaret, MEd Davis, Elizabeth, MEd

#### **Emeritus Faculty**

Ogilvie, Charles D., DO, FAOCR, FACOS Professor Emeritus, Medical Humanities

(see also Professional Library Faculty Roster)

# Family Medicine

The Department of Family Medicine's clinical and educational responsibilities have been an important educational component of TCOM since its inception. The Department's affiliated

clinics form the largest clinical and educational network of ambulatory primary care clinics within the medical school. Our collaboration in October 2005 with the Division of Community Medicine at the John Peter Smith Hospital further increased this network. The Department's mission is to improve the health of the people of Texas and the nation through leadership in exemplary osteopathic family medicine education, clinical practice, research and community service. To fulfill this mission, the Department's activities include the following:

- Develop and maintain model osteopathic family medicine educational programs for medical, physician assistant and allied health students, resident physicians and other faculty and practicing physicians who train future health care providers.
- Provide and teach comprehensive, highquality, cost-effective and humanistic health care in the Department's network of ambulatory family medicine clinical education centers through interdisciplinary cooperation.
- Promote the discovery and dissemination of new knowledge important to teaching, clinical practice and the organization of health care through research and other scholarly pursuits.
- Work in partnership with individuals, urban and rural communities, organizations, and government agencies to address unmet primary care needs through education, community service and contributions to innovation and change in health care delivery systems.
- Provide a nurturing educational and work environment where creativity is encouraged and diversity is respected.

The Department's faculty represent diverse academic, clinical, ethnic and demographic backgrounds. The core faculty is composed of physicians, social scientists, nurse practitioners and physician assistants and provides a continuous influence in the lives of TCOM medical and physician assistant students. Family medicine instruction includes medical interviewing, physical examination, physical diagnosis, ambulatory family practice and elective courses in sports medicine and emergency medicine. The Department has also developed a four-year longitudinal curriculum in rural medicine. The Rural Osteopathic Medical Eduction of Texas (ROME) curriculum is designed to prepare the graduate for practice in the special environment of rural medicine.

The projects link medical education and health care resources to build and strengthen community-based education programs.

The Department administers affiliated family practice residency programs in the state of Texas through OPTI. The learning focus is broad in scope. The Department directly supports Plaza Medical Family Practice Residents, including a full-time hospital ward service to further enhance the education of resident, medical and physician assistant students.

In addition to teaching the management of common illnesses, the program emphasizes problem solving, health maintenance promotion and illness prevention and examines the relationship of psychosocial and environmental factors to health, illness and preparedness for the managed care market. Residents can earn an MPH degree during their residency programs and begin in their fourth year of medical school as TCOM students.

The vision of the Department of Family Medicine is to be an academic department of national stature. Many faculty members are involved in research projects with other departments in TCOM, the Graduate School of Biomedical Sciences (GSBS) and the School of Public Health (SPH) within the health science center, as well as with other universities and academic health centers in Texas. Grants within the Department range from National Institutes of Health projects on efficacy of osteopathic medicine to clinical outcomes studies on diabetes, prevention of cardiovascular disease, sleep apnea and clinical drug trials.

Students are encouraged to participate in individual research projects or join established family medicine research activities. The mentoring of medical students, family medicine clinicians and researchers within the Department's Division of Education and Research (DEAR) provides an opportune learning experience for students. Opportunities to complete abstracts, posters and publications are encouraged. Pre- and postdoctoral fellowships are available. A Palliative Medicine Fellowship at Universal Health is a one year fellowship with an optional second year leading to a Master of Science (MS) degree in clinical research or education. The Department of Family Medicine's commitment to be an academic department of national stature was enhanced by the creation in 2005 of the North Texas Primary Care Practice-Based Research Network (NorTex). NorTex is a collaborative network of physicians located throughout North Texas who perform patient-oriented evidencebased research. NorTex serves as a model for the organization of practice-based research groups and will provide additional research opportunities for students.

# Faculty Roster

Palmarozzi, Elizabeth, DO, C-FP, DNB Chair and Associate Professor BS Lamar University DO Texas College of Osteopathic Medicine

Adams, Barbara, MSA

Instructor and Assistant Director, Division of Rural Medicine BA University of Washington MSA Georgia College & University

#### Aspirilla, Maria, DO

Assistant Professor BS Texas Woman's University DO Texas College of Osteopathic Medicine

Boozer, Carolyn, ANP, MSN Instructor MSN University of Texas at Arlington

**Bowling, John R., DO, FACOFP, C-FP, DNB** Associate Professor and Assistant Dean for Rural Medicine BS Ohio University DO Kirksville College of Osteopathic Medicine

Cage, A. Clifton, DO, C-FP, DNB

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### Cardarelli, Roberto, DO, MPH

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#### Chen, Yung, DO

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#### Cintron, Ramon A., MD

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#### Clarke, Howard F., Jr., MPAS, PA-C

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#### Coleridge, Samuel T., DO, FACEP,

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#### Dayberry, D. Tom, DO, C-FP, PhD

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#### Del Rosario, Edwin O., MD

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Flowers, LaTosha, MD

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#### Franklin, Sara, DO

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#### Franks, Susan F., PhD

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#### Gramer, Jill, DO, C-FP

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Hailey, Frank I., RN, NP Instructor BA Minot State College BSN Texas Christian University NP Academy of Health Sciences

Jabbar, Sarah U., DO Assistant Professor BS University of Texas at Arlington DO Texas College of Osteopathic Medicine

Kiger, Madeline K., RN, MS, CS, PNP Instructor BSN University of Texas at Arlington MS Texas Woman's University

NP University of Texas at Arlington

Lum, Daniel C., MD Assistant Professor BS Rhodes College MD University of Arkansas

Mann, Christopher, DO Assistant Professor BA Texas Tech University DO Texas College of Osteopathic Medicine

Mills, John G., DO, MS, FAOCPM Associate Professor BS, MS & DO Michigan State University MPH University of Michigan

### Namboodiri, Maya, DO

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**Nguyen, Tuan D., DO** Assistant Professor BA University of Texas at Austin DO Nova Southeastern University

#### Nguyen, Tuan H., MD

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**Orr, Royline B., RN, CS, FNP** Instructor ASN Tarrant County College BS Chadwick University FNP University of Texas at Arlington

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Sanderlin, Brent, DO Assistant Professor BS Texas State University DO University of North Texas Health Science Center

Sanders, Mark, DO, JD, MPH Assistant Professor BA Texas Christian University DO University of North Texas Health Science Center JD Texas Wesleyan University MPH University of North Texas Health Science

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Center

#### Sandhu, Rajbir, MD, MPH

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# Sanni-Thomas, Peter, DO

BS Prarie View A&M DO Philadelphia College of Osteopathic Medicine

#### Saperstein, Phillip P., DO, FACOFP, C-FP Professor BA Yale University

DO Kansas City College of Osteopathic Medicine

Schranz, Damon, DO Assistant Professor

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Sivoravong, Jon C., DO, C-FP Assistant Professor BA University of Missouri-Columbia DO Texas College of Osteopathic Medicine

Siy, Linda, MD Assistant Professor MD University of Missouri-Kansas

Stehly, Carol, MEd Instructor BS & MEd University of Minnesota

#### Tanner, Ronald, DO, PhD

Associate Professor, Director, Center for Family Medicine Advancement BS University of Arkansas MS University of Arkansas DO Kansas City College of Osteopathic Medicine PhD Christian Bible College

#### Tran, Mytrang Thi, MD, FACP

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**Urban, Stephen F., DO, FACOFP, C-FP** Professor BA University of Buffalo DO Kirksville College of Osteopathic Medicine

Velasco, Luis A., MD, ABOFP Assistant Professor BS Universidad de Puerto Rico MD Universidad Central del Este

Virgilio, Richard F., DO, MS Assistant Professor BA LaSalle University DO Des Moines University and Osteopathic Medical Center

Vu, Chi H., MD Assistant Professor MD Louisianan State University Medical Center

# Affiliated Faculty

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Angelo, Christopher, DO Apsley-Ambriz, Sara, DO Barclay, Scott, DO Barkman, William, DO Bedkowska, Ursula, MD Burke, Andrew, DO Castoldi, Thomas, DO Cook, Charles, DO Cunniff, Nelda, DO De Luca, Robert, DO Faigan, Al, DO Franz, Charles, DO Galewaler, John, DO Garmon, Anesia, DO Gross, Robert, MD Hames, Robert, DO Hayes, Randall, DO Hill, Frederick, DO, PA Hinshaw, Duane, DO James, Kyle D., MD Kaplan, Gary, DO Kelley, Jeffrey, DO Kravetz, James, DO Lewis, Harold, DO Lindsey, George, DO Linton, James, DO Listopad, Aaron, DO Lopez, Hector, DO Maul, R. Greg, DO Maxwell, Jack, DO Merrill, James, DO Miller, Linus, DO Nelon, Craig, DO Pearson, Philip, DO Peters, Robert, Jr., DO Poetz, Robert Paul, DO Randolph, Harvey, DO Rogers, William, DO Sandknop, Les, DO Saylak, Daniel, DO Schwartz, John, DO Sharp, Larry, DO Shields, Robert, DO Smith, George, DO Smith, Gregory, DO Sparks, Robert, DO Strazynski, Josef, DO Stroud, Joyce, DO Thomas, Harold, DO Thompson, John, DO Umstattd, W. Robert, DO Underleider, Barry I., DO Wiseman, Rodney, DO Young, Michael, DO Zini, James, DO

#### **Clinical Assistant Professor**

Albarracin, Cesar, MD Bair, Stephen, DO Bander, Steven, DO Barrington, Patricia, DO Beasley, George, DO Beene, Ronda, DO Behrens, Kenyon, DO Bell, Christopher, DO Bell, Dennis Michael, DO Berg, Alan, DO Bernstein, Basil, MD Bickley, Mark, DO Bishop, Steven, DO Bogdanovich, Michael, MD Bolton, Christopher, MD Bowling, Robert, DO Boyd, Theresa, DO Brooks, Sister Anne, DO Brown, Wayne, DO

Bryant, Kevin, DO Bunnell, Brent, DO Cantu, Ramon, DO Carlson, John, DO Casper, Denise, DO Champine, Michael, MD Chandler, Richard, DO Czewski, James, DO Daley, Rebecca, DO Eady, Christine M., DO Ellerbe, Steven, DO Ensey, Jane, DO Escolas, John, DO Evans, E.C. Jr., DO Farzam, Steven, MD Faseler, Robert, DO Foreman, Kim, MD Funk, Dale, MD Gafford, Dean, DO Garza, David, DO Gerstenberg, K. Paul, DO Glaser, Stephen, DO Gouldy, David, DO Guevara, Alex, Jr., DO Hall, Charles, DO Hall, Robin, DO Hanford, Patrick, DO Hanna, John, DO Hardwicke, Alan, MD Harris, Wayne, DO Harvey, Ruth, DO Hassett, Robert, DO Hawley, Patrick, MD Haynes, John H. III, MD Hazelip, Sandra, DO, PA Hedges, Tony, DO Henry, Robert Allen, Jr., DO Hill, David, DO Hill, Stuart, DO Hisey, Commie, DO Hoffman, Krishali D., DO Holtz, Christina, DO Holtz, Robert, DO Hooker, Roderick, PhD, PA Howard, Bobby, DO Howell, Shelley, DO Hoyt, David, DO Hutchins, Jeffrey, DO Inman, Jamie, DO Irvine, James, DO Janiak, Daniel, DO Johnson, Jeffrey, DO Judd, Timothy, DO Juetersonke, George, DO Kelley, Robert, DO Kincheleo, Albert, DO Kinsfather, Teresa, DO Kislingbury, Todd, DO Knapp, George, DO Knox, Jonathan, DO Kocsis, Imre, DO Kretzer, Mary, DO Kretzschmar, Shaun, DO Kuenstler, Kevin, MD Lang, Howard, DO Lawrence, Kevin S., MD Lee, Samuel, DO LeFever, Leroy, DO Leins, Edward, DO Ling, Shirat, DO MacClements, Jonathan E., MD Macik, Felicia K., DO Mahmoud, Waleed, DO Maniet, Bruce, DO Martin, Luther, DO Matthew, Robert L. Jr., BS, PA-C

McClanahan, Mark, DO McCrory, Kathleen, DO McDaniel, Ronald, DO McElva, Martin, DO McKernan, Stephen L., DO Megna, Robert, DO Migala, Alexander F., DO Mills, Charles, DO Mitchell, Shaunna, DO Moehring, Kurt, DO Moser, Doreen, DO Moss, Judith, DO Nance, Henry, DO Nichols, Stephen, MD Nivens, Jamie, DO Orlov, Alexander, DO Oswald, Richard, DO Palmer, Hugh, DO Paul, Robert, DO Perkins, Randall C., DO Perry, Richard, DO Pham, Tony, DO Pieniazek, Jack, DO Purgason, James, MD Randell, David, DO Ray, David, DO Rector-Wright, Ruth, DO Rettig, Jeffrey, DO Richard, Robert, DO Ruggiero, Michael, DO Sanchez, Mario, DO Santone, Pamela, DO Saucedo, Joseph, DO Sawtelle, John L., DO Scott, Karen, DO Scott, Randolph, DO Shue, Randall, DO Shima, Thomas, DO Siewert, Rick A., DO Simonak, David, DO Sone, Daniel, DO Spradlin, James, DO Stark, Robert, DO Stewart, Angelene, DO Stewart, Ronald, DO Tarver, Denise, DO Thomas, George, DO Thomas, William, Jr., DO Thomason, Dwayne, DO Todd, Jansen, DO Tsui, Patrick, DO Urich, Norman, DO Vanderheiden, David, DO Vasquez, Jaime, DO Walker, Brent, DO Wallingford, Craig, DO Walter, Margaret, DO Wang, Jeff, DO Wasson, Bradley, DO Weaver, William, DO Whiting, Craig, DO Williams, Michael, DO Williamson, Scott, MD Wilson, Wesley, DO Wright, David, DO Wysoki, Joseph, DO Yeoham, Loraine, DO Yount, Steven, DO Zamora, Sergio, DO Zengerle, Claire, DO

# Clinical Instructor

Bereznoff, Craig, DO Biery, John, DO Bingham, Mark, PA-C Black, Keith, DO

Campbell-Fox, Mary, DO Clory, Michael, PA-C Conner, Barbara N., MD Copeland, Jon, DO Daniels, Ronald, DO Dennis, Sharon, DO Dott, Kenneth, DO Dow, Glendal, DO Erickson, Richard C., DO Evans, Stanley, DO Forelich, James, E. III, DO Giles, William, DO Green, Peter, MD Haman, Mark, DO Hardy, William, Jr., PA-C Hodde, James D., MD Johnson, J.S., MD Hooper, Dan RPh Humphries, Kathleen, DO Irvine, Sharon, DO Isbell, Phillip, DO Jafarian, Ali, DO Johnson, J.S., MD Leifheit, Steven, DO Lewis, Carlton, DO Lonergan, Frank, MD Metzger, Daniel, DO Mohney, John, DO Penning, Christopher, DO Phillips, Kyle, PA-C Seger, William, MD Sherbert, Ronald, DO Simpson, Charles, MD Spain, John, DO Stahl, Kevin, DO Stegall, Scott, PA-C Waddleton, Beverly, DO Watson, Terry, DO Whiteley, Michael, DO Whitley, Douglas, DO Wolpin, Alan, Do Yeo, Nancy, DO

#### **Clinical Professor**

Wright, Paul, MD

Research Associate Professor Gibbs, Tyson, PhD Schumacher, Randall, PhD

Research Assistant Professor Gonzales, Adela, MPA, PhD

Research Instructor Fulda, Kimberly, MPH

**Emeritus Faculty** Zachary, Eugene T., DO Professor Emeritus, Family Medicine

# Integrative Physiology

The Department of Integrative Physiology is recognized nationally and internationally for its research on the integrative physiological mechanisms of cardiovascular regulation in health and disease. Research models investigate the regulation of coronary circulation, cardiac function and myocardial energy metabolism of healthy and diseased hearts under conditions of exercise, ischemia, obesity, diabetes and hypertension. In addition, investigation of cardiovascular regulation during gravitational and exercise stress is performed in humans across all age groups. Specific emphasis is placed on investigating the integration of multiple systems. The department's various research projects are supported by grants from the National Institutes of Health, the American Heart Association (national and Texas affiliates), the National Aeronautics and Space Administration and the American Diabetes Association.

# Faculty Roster

Smith, Michael L., PhD Professor and Chair BS Texas Lutheran College MS Southern Illinois University PhD University of North Texas

**Caffrey, James L., PhD** Professor BA Rutgers University PhD University of Virginia

**Carroll, Joan F., PhD** Assistant Professor BA State University of New York at Binghamton MA and PhD University of Florida

Dimitrijevich, S. Dan, PhD Research Associate Professor BS and PhD University of Bath

**Downey, H. Fred, PhD** Professor BS and MS University of Maryland PhD University of Illinois at Urbana-Champaign

**Grant, Stephen R., PhD** Associate Professor BA Westmar College MS and PhD University of Tennessee

Gwirtz, Patricia A., PhD Professor

BS Drexel University PhD Thomas Jefferson University

#### Ma, Rong, MD, PhD

Assistant Professor BS Anhui Medical University MD Anhui Medical University MS Anhui Medical University PhD University of Nebraska Medical Center

Mallet, Robert T., PhD Associate Professor BS Catholic University of America PhD George Washington University

Raven, Peter B., PhD Professor BS, MS and PhD University of Oregon

Shi, Xiangrong, PhD Associate Professor BA Shanghai Teachers University MS Shanghai Institute of Physical Education PhD Yale University

# Adjunct Faculty

Adjunct Professor Burk, John, MD, FACP Raven, Peter, PhD

Adjunct Associate Professor Olivencia-Yurvati, Albert H., DO, FICS, FACOS Squires, William, PhD

Adjunct Assistant Professor

Foresman, Brian, DO Hannaman, Mary, MD Stoll, Scott, DO, PhD

Research Assistant Instructor Ogoh, Shigehiko, PhD

# **Internal Medicine**

The Department of Internal Medicine prepares osteopathic medical students and other health science center students for successful practices in primary care and subspecialty disciplines. Department faculty members honor the principles of osteopathic medicine, including health promotion, disease prevention and nutrition in all teaching activities, and they strive to serve as role models and mentors for all students. The department makes every effort to ensure that the training offered by its faculty is of the highest quality and is always respectful of the students' needs.

# Faculty Roster

**Troutman, Monte E., DO, FACOI** Associate Professor (Gastroenterology) Chief, Division of Gatroenterology Chair, Department Internal Medicine BS Bowling Green State University DO Chicago College of Osteopathic Medicine

Alexander, Jennifer R., D.O. Assistant Professor (General Internal Medicine) BS Oklahoma State University DO OSU College of Osteopathic Medicine

Al-Farra, Sherif, MD, FCCP, D.ABSM Assistant Professor (Pulmonary and Critical Care Medicine) MD King Saud University College of Medicine

Atkinson, Barbara A., DO, FACOI Associate Professor (Infectious Disease) BS Michigan State University MA Central Michigan University DO Michigan State University

Bastible, Baylen Clint, PA-C Instructor (General Internal Medicine) BS University of North Texas MPAS University of North Texas Health Science Center

**Cha, Sharon Natasha, PS-C** Instructor (Rheumatology) AS Jamestown Community College AS Brookhaven Community College PA University of North Texas Health Science Center

Chesky, Kris, PhD Research Assistant Professor (Rheumatology) BM Berklee College MME and PhD University of North Texas

Davis, Linda, MHS, PA-C Assistant Professor of Medicine (Rheumatology) BS Northwestern State University MEd Northeast Louisiana University PA-C Quinnipiac

# Dubin, Bruce, DO, JD

Associate Professor (Pulmonary and Critical Care Medicine) Associate Dean, Academic Affairs Medical Director, Physician Assistant Studies BA, Eastern Michigan University DO, Kirksville College of Osteopathic Medicine

### Garcia, Paul J., DO

Assistant Professor (General Internal Medicine) BS Biola University DO Texas College of Osteopathic Medicine

#### Hall, James R., PhD

Chair, Department of Psychology and Associate Professor BA University of Iowa PhD University of Nevada at Reno

#### Harty, Barbara, MSN, GNP

Assistant Professor (Geriatrics) BSN and MSN The University of Texas at Arlington

#### Heffernan, Jennifer, MD

Assistant Professor (Geriatrics) BA Florida Atlantic University MD University of Miami School of Medicine

#### Hoang, Long, D.O.

Assistant Professor (Gastroenterology) BS and MS University of North Texas DO Texas College of Osteopathic Medicine

Holzaepfel, Kathleen, LMWS, MSSW

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#### Kindler, Karen, PA-C

Instructor (Gastroenterology) BA Baylor University BS Physician Assistant Studies Texas College of Osteopathic Medicine

#### Knebl, Janice A., DO, MBA, FACP, FACOI

Professor (Geriatrics) BS St. Joseph's University DO Philadelphia College of Osteopathic Medicine

#### Mathé, Alvin J., DO

Assistant Professor (General Internal Medicine) BA Texas A&M University DO Texas College of Osteopathic Medicine

McConathy, Walter J., PhD Associate Professor (Clinical Research) BA and BS University of Oklahoma, PhD University of Oklahoma School of Medicine

#### McFarland, Michael, K., DO

Assistant Professor (General Internal Medicine) BS Missouri Institute of Technology DO University of North Texas Health Science Center

#### McIntosh, William E., DO

Associate Professor (Neurology) BA University of Cincinnati DO University of Osteopathic Medicine and Health Sciences

Munguia-Bayona, Guadalupe, MD Instructor

BS National Prepatory School. National University of Mexico (UNAM) MD School of Medicine, UNAM

#### Orr, J. David, DO

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#### Patel, Rahul K., M.D.

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#### Pertusi, Raymond M., DO, FACP

Associate Professor (Rheumatology) BA New York University DO New York College of Osteopathic Medicine

#### Pham, Chau N., DO, MPH

Assistant Professor (Geriatrics) BA Rutgers University DO Ohio University College of Osteopathic Medicine

#### Reese, Sherry, RNP

Instructor (Geriatrics) BSN Texas Christian University MSN and FNP Texas Woman's University

# Rubin, Bernard R., DO, MPHI

Professor (Rheumatology) BS University of Illinois at Urbana-Champaign DO Chicago College of Osteopathic Medicine MPH University of North Texas Health Science Center at Fort Worth

#### Schaller, Frederick A., DO, FACOI

Associate Professor (Cardiology) BA University of Delaware DO Michigan State University College of Osteopathic Medicine

#### Sharaf, Mai F., MD

Assistant Professor (General Internal Medicine) BS University of Arkansas MD University of Arkansas for Medical Sciences

#### Spellman, Craig W., PhD, DO

Associate Professor (General Internal Medicine) BS University of Washington MS Montana State University PhD University of Utah DO Texas College of Osteopathic Medicine

# Tak, Tahir, MD, PhD

Professor (Cardiology) BS Government College, University of Punjab MD University of Nijmegen

#### Tierney, Nancy A., RN, MSN, PhD

Assistant Professor (Cardiology) BSN Marquette University MSN University of Wisconsin-Milwaukee PhD University of Texas at Austin

#### Torres, Cathy, SWA, MHSM

Instructor (Geriatrics) BS University of North Texas MHSM University of Mary Hardin-Baylor

#### Tran, Thuc-Nguyen (Gwen), DO Assistant Professor (Geriatrics) BS Texas A&M University

DO The University of Health Sciences, College of Osteopathic Medicine

#### Watson, Rhoda, RN, GACNP

Instructor (Gastroenterology) BS Texas Christian University BSN Texas Christian University MSN University of Texas at Arlington

#### Weis, Stephen E., DO, FACOI

Professor (Endocrinology) BS Iowa State University DO University of Osteopathic Medicine and Health Sciences

#### Weiss, Martin S., DO

Assistant Professor (Cardiology) BS Albright College DO Philadelphia College of Osteopathic Medicine

#### Willis, John M., DO, FACOI

Assistant Professor (General Internal Medicine) BS Southwestern Oklahoma State University DO Texas College of Osteopathic Medicine

#### Affiliated Faculty

**Clinical Professor** 

Girard, William M., MD Griffith, David E., MD

#### **Clinical Associate Professor**

Couch, Leslie A., MD Dipaola, David P., MD Fairchild, Thomas J., PhD Gratch, Jack O., DO Pemmaraju, Sankar, DO Widerhorn, Josef, MD

#### **Clinical Assistant Professor**

Adamo, Michael P., DO Adams, Elvin, MD Adams, John. W., DO Agoro, Adesubomi, MD Aziz, Shahid, DO Barry, John, MD Blanck, Ronald R., DO Bryce, Errol, MD Chang, Shelly-Ann, MD Claxton, Anthony, MD Clibon, Unamarie, MD, PharmD Cohen, Phillip, DO, PA Cothern, William F., DO Eelani, Frood, DO Estep, Rita Merge, MD Etter, Gary L., MD Feingold, Richard J., DO Firstenberg, Barry A., DO Fisher, Aileen, MD Friess, Gregory G., DO Frusher, Donald, DO Garrison, Daniel L., MD Godwin, Karen, PhD Hartman, Israel, MD Houtz. Andrew W., PhD Hunter, Leigh K., MD Jordan, William M., DO Khammar, George S., MD Kopman, Norman, DO Lastimosa, Augusto Cezar, MD Laveni, Olufemi, MD Le, Quang, DO Loeb, Lazarus, MD Maldonado, Gilbert, MD Mandell, Harold Lance, MD

Hehta, Niraj, DO Miller, Douglas S., MD Mills, Jeffrey A., DO Mize, Samuel R., MD Mudalair, Chandramoham, MD Mundluru, Giri, MD Nair, Chandrasekharen, MD Nophsker, Theodore, DO Pincus, Lewis M., DO Pogoda, Janice, PhD Romero, Richard, MD Ross, Michael B., MD Sahbazian, Behzad, DO Sankarapandian, Ponniah, MD Shori, Sandeep, DO Skiba, Mary Ann, DO Strauss, Mark G., MD Taskar, Varsha S., RN, MSN, PhD Trese, Thomas J., DO Walder, Lon, DO Winter, Anthony, MD

#### **Clinical Instructor**

Bernard, Jack, MD Casey, David, PA-C Johnson, Steven, MD Keller, Robert, MD

# Manipulative Medicine

To find health should be the object of the doctor. Anyone can find disease. A.T. Still

**manual medicine**: the use of the hands to diagnose and treat disorders of the somatic system.

The Osteopathic Manipulative Medicine (OMM) Department is responsible for the lion-share of OMM education occurring at UNTHSC. The faculty members of the OMM Department are the course directors for the Year I and Year II OMM courses, which are part of the osteopathic medical curriculum. There is a mandatory core clinical clerkship in OMM during the third year of medical school, which is directed and taught by our OMM faculty. Our OMM faculty members direct and teach "Plus-One" and Two-year Residents in Neuromusculoskeletal Medicine and OMM and are also involved in a variety of continuing medical education courses related to this speciality.

We see our responsibility to include a seven (plus) year OMM medical curriculum. We strive to develop a rational plan for taking medical students from introduction to osteopathic history and palpatory skill to a final post-graduate product of a clinician confident and competent in daily application of OMM in a wide-variety of clinical conditions. Special programs within this seven year curriculum including a Teaching Assistant Program which enables eighteen second year medical student to earn additional money and develop additional skills by providing assistance in the OMM laboratory in training both Year I and Year II medical students. We also have a rich Pre-Doctoral Fellowship Program which allows exceptional and interested medical students to add an additional year to their undergraduate medical education to focus on clinical skills, education and research in the area of OMM. This standardized seven year curriculum in combination with specialized programs such as the Teaching Assistant Program and Pre-doctoral Fellowship Program allow both

a broad minimum competency for all of our students as well as opportunities for appropriate individuals to excel in the specialty of OMM.

The osteopathic philosophy is rooted in four basic concepts: first, the human being is a dynamic unit of function; second, the body possesses self-regulatory mechanisms which are self-healing in nature; third, structure and function are interrelated at all levels; and fourth, rational treatment is based on these principles.

The mission of the Department of OMM is to apply these osteopathic con-cepts and philosophies to the teaching of stu-dents and residents, continuing research in the scientific bases for osteopathy, and treating patients in clinic and hospital settings. Faculty members, residents, undergraduate teaching fellows and students work together to provide quality osteopathic manipulative patient care for all people from infancy to the elderly. The physi-cians in the OMM department use a variety of methods and treatments to maximize the body's inherent selfhealing prop-erties. Students will learn to use direct and indi-rect manual methods that act on structures to improve function and thereby augment the body's self-regulating and self-healing processes.

The Department of Osteopathic Manipulative Medicine (OMM), in association with the Physical Medicine Institute and the Osteopathic Research Center, is uniquely positioned to substantially contribute to the national effort to enhance medical education and research within the osteopathic profession.

# Faculty Roster

#### Stoll, Scott T., DO, PhD

Chair and Associate Professor BS University of Kentucky, Lexington DO Texas College of Osteopathic Medicine PhD University of North Texas

#### Cruser, des Anges, PhD, MPA

Associate Professor BA St. Joseph College MPA University of Arkansas PhD Oklahoma State University

#### Dickey, Jerry L., DO, FAAO

Associate Professor BS Texas Wesleyan University DO Kirksville College of Osteopathic Medicine

Gamber, Russell G., DO, MPH Professor

BA West Virginia University MPH UNT Health Science Center DO Kirksville College of Osteopathic Medicine

#### King, Hollis, DO, PhD

Associate Professor BA Duke University MS Trinity University PhD Louisiana State University DO Texas College of Osteopathic Medicine

#### Licciardone, John, DO, MS, MBA

Associate Professor BS Fordham University MS Ohio State University DO Kirksville College of Osteopathic Medicine MBA Texas Christian University

McGill, Jerry C., PhD

Associate Professor BA Hardin-Simmons University MA Texas Tech University PhD University of North Texas

#### Pim, Kendi, DO

Assistant Professor BS Louisiana Scholars' College at Northwester State University DO Oklahoma State University College of Osteopathic Medicine

#### Williams, Stuart F., DO, C-FP, FACOFP

Associate Professor BA Baylor University DO Texas College of Osteopathic Medicine

#### Witryol, Walter, MD

Assistant Professor BS Massachusetts Institute of Technology MD University of Connecticut School of Medicine

# Affiliated Faculty

#### **Clinical Assistant Professor**

Adedokun, Ade, SO, RPh Birdy, Karen, PA Cordas, Steven, DO, MPH Cotton, Nell, DO English, Wayne, DO Jayes, Randall, DO Holubec, Jerry, DO Kalich, Allan, DO Pham, Chau, DO Radar, Daniel, DO Reese, Phillip, DO Speece, Arthur, DO Teitelbaum, David, DO, DVM

# Master of Physician Assistant Studies

The Master of Physician Assistant Studies (MPAS) degree program provides an exemplary education to physician assistant (PA) students planning for careers in primary health care, teaching and research. The PA program is housed within the Texas College of Osteopathic Medicine and supports the university's mission to teach primary healthcare and to develop interdisciplinary approaches to healthcare delivery.

As a program in the college of medicine, we are uniquely qualified to provide PA education in primary care. Students learn in campus classrooms as well as in clinics managed by the medical school. Students also accomplish clinical rotations in other locations throughout Dallas-Fort Worth and Texas. Faculty members have diverse backgrounds ranging from primary to specialty care in medical and surgical disciplines. In addition, students are taught by physician faculty and scientists in the college. Learning in this environment promotes mutual respect and understanding between these health-related professions.

The PA program is designed to teach the competencies required to practice as a PA. As members of the healthcare team, our graduates provide professional preventive and primary health care services to patients. As a master's level program, we place additional emphasis on defining healthcare needs of underserved populations and critical analysis of clinically-related research. Graduates obtain advanced knowledge and skills in implementing research proto-

cols, analyzing outcomes, and making medical decisions based on population-based studies.

We encourage applications from individuals who are broadly representative of the ethnic, cultural and socioeconomic groups they wish to serve as practitioners. The MPAS degree program is accredited by the Accreditation Review Commission on Education for the Physician Assistant since 1997. PA graduates are eligible to sit for the national certifying examination administered by the National Commission on Certification of Physician Assistants and required in most states for licensure as a PA.

#### Faculty Roster

#### Lemke, Henry R., MMS, PA-C

Assistant Professor Director, Physician Assistant Studies BS/PA, University of Oklahoma Health Science Center/USAF MMS, St. Francis College

#### Chen, Olive, PhD

Assistant Professor Coordinator of Research Studies BS, Catholic Fu-Jen University PhD, Texas Women's University

#### Clark, Michael, PhD, PA-C

Assistant Professor BS/PA, University of Oklahoma Health Science Center/USAF PhD, City University of Los Angeles

#### Cooper, Christopher, MPAS, PA-C

Assistant Professor BS/PA, University of Nebraska Medical Center, Omaha MPAS, University of Nebraska Medical Center, Omaha

#### Dubin, Bruce, DO, JD

Associate Professor Medical Director, Physician Assistant Studies BA, Eastern Michigan University DO, Kirksville College of Osteopathic Medicine

#### Firozbakht, Parvaneh, MMS, PA-C

Instructor BS Western Michigan University MMS, PA Western Michigan University

#### Hill, Laurie, PA-C

Assistant Professor PA-C Quinnipiac College MHS-PA, Quinnipiac College,

#### Pagels, Patti, MPAS, PA-C

Assistant Professor Clinical Education Coordinator BA, University of Texas at El Paso BS/PA, University of Texas Southwestern Medical School at Dallas MPAS, University of Nebraska Medical Center, Omaha

#### Reed, Linda, MEd, PA

Assistant Professor Associate Director/Academic Coordinator BS University of Oklahoma BS/PA, University of Oklahoma Health Science Center MEd, University of Oklahoma

#### Roch, James, MPAS, PA-C

Assistant Professor BS/PA, University of Oklahoma Health Science Center/USAF MPAS, University of Nebraska Medical Center, Omaha

# Molecular Biology and Immunology

The Department of Molecular Biology and Immunology has achieved excellence in multiple disciplines through the leadership of numerous nationally and internationally recognized experts. These disciplines include biochemistry, molecular biology, microbiology, immunology, molecular biophysics and biotechnology, all of which impact major health issues such as cancer, aging and Alzheimer's disease, respiratory disease, cardio-vascular disease, diabetes, wound healing, and musculoskeletal disease. This affords the department unparalleled opportunities for multidisciplinary research projects and training opportunities for students.

Research spans a wide spectrum from basic biochemical and biophysical investigations to applied biotechnology to development of new pharmaceuticals. Research interests include molecular and biochemical cancer studies of growth factors, extracellular matrix degradation, apoptosis, invasion, angiogenesis and cancer metastasis; the regulation of cytokine gene expression; signal transduction; age-related changes in protein structure and function; endothelial cells and the arterial wall; steroid-binding proteins; the regulation of prokaryotic and eukaryotic gene expression; the molecular biology of microbial virulence; the regulation of bacterial carbohydrate metabolism; host response to respiratory infections; molecular immunology; autoimmunity and tumor immunology; the structure and function of the human chromosome; and vaccine development.

Faculty members have received five Research Career Development Awards and a MERIT Award from the National Institutes of Health. Faculty members serve as consultants for pharmaceutical and biotechnology industries, and chair, and/or participate in peer-review study sections and review panels of the National Institutes of Health, the National Science Foundation, the Department of Veteran Affairs, the Department of Defense, and other public and private agencies. Faculty members also participate as members of editorial boards, chair national and international meetings, and hold offices in national societies.

Research projects are funded by sources including the National Institutes of Health, the National Science Foundation, the American Cancer Society, the American Lung Association, the American Heart Association, and pharmaceutical and biotechnology companies. The department recently received a grant from the prestigious Robert A. Welch Foundation for an endowed chair in biochemistry. This \$1 million endowment has been matched by an additional \$1 million.

# Faculty Roster

Simecka, Jerry W., PhD Chair and Professor BS University of California at Irvine PhD University of Alabama at Birmingham

Alvarez-Gonzalez, Rafael, PhD Associate Professor BS Universidad de Michoacan MS and PhD University of North Texas

Basu, Alakananda, PhD Professor BSc and MSc University of Calcutta PhD University of Pittsburgh School of Medicine

**Berg, Rance, PhD** Assistant Professor BS DePaul University PhD University of Colorado Health Science Center

**Borejdo, Julian, PhD** Professor BS and PhD Macquarie University

**Dory, Ladislav, PhD** Professor and Vice Chair BS University of Manitoba PhD McGill University

Easom, Richard A., PhD Associate Professor BS University of Bath PhD University of Glasgow

#### Gryczynski, Ignancy, PhD

Professor (Joint appointment with Cell Biology and Genetics) MS University of Gdansk, Poland PhD University of Gdansk, Poland

Gryczynski, Jygmunt, PhD

Professor (Joint appointment with Cell Biology and Genetics) MS University of Gdansk, Poland PhD University of Gdansk, Poland

#### Harris, Ben G., PhD

Regents Professor BS Southwestern Oklahoma State University MS and PhD Oklahoma State University

Hodge, Lisa M., PhD Research Assistant Professor BS University of Texas at Arlington PhD University of North Texas Health Science Center

Jones, Harlan, PhD Assistant Professor BS Louisiana State University MS Southern University PhD University of North Texas Health Science Center

Kim, Myoung H., PhD Assistant Professor BS YonSei University PhD Texas A&M University

Kudchodkar, B. J., PhD Research Associate Professor BS University of Bombay MS University of Punjab MS and PhD University of Saskatchewan

Lacko, Andras G., PhD Professor BSA and MS University of British Columbia PhD University of Washington

Matveeva, Evgenia G., PhD Research Assistant Professor MS Moscow State University MS Moscow State University

Mathew, Porunelloor A., PhD Associate Professor BS University of Kerala MS and PhD University of Poona

Mathew, Stephen, PhD Research Assistant Professor BS, MS, PhD R.D. University, Jabalpur

Nair, Maya, PhD Research Assistant Professor MS Cochin University of Science and Technology PhD University of Kerala

Prokai, Laszlo, PhD, Drhabil Welch Professor BS, MS, PhD University of Veszprem

Rao, G. S. J., PhD Assistant Professor BS and MS Bangalore University PhD Indian Institute of Science

Shu, Honjun, PhD Research Assistant Professor MS Beijing Agricultural University PhD Institute of Chemistry, Chinese Academy of Sciences

#### Viswanatha, Jamboor, PhD

Professor and Associate Dean BS, MS University of Agricultural Sciences, Bangalore PhD University of South Carolina

Wu, Ming-Chi, PhD Professor BS National Taiwan University PhD University of Wisconsin

#### Affiliated Faculty

Adjunct Professor Cammarata, Patrick R., PhD Clark, Abbot F., PhD Das, Hriday K., PhD Gracy, Rovert W., PhD Podgore, John, DO, MPH Romeo, Tony, PhD Weiner, Alan L., PhD

Adjunct Associate Professor

Fling, John, MD Garner, Margaret H., PhD McConathy, Walter J., PhD Pertusi, Raymond, DO Spellman, Craig W., PhD, DO

#### **Adjunct Assistant Professor**

Atkinson, Barbara, DO Daniels, Egeenee Q., DVM Hart, Mark E., PhD Kumaresan, Pappanaicken R., PhD Sims, James L., PhD

#### Emeritus Faculty

Harris, Elizabeth F., PhD

Associate Professor Emeritus

# Obstetrics and Gynecology

The Department of Obstetrics and Gynecology participates in a broad range of activities supporting the mission of the health science center, including patient care, under-graduate education, graduate medical education, service and scholarly activities.

The department's central clinic and community-based women's healthcare clinics have approximately 9,000 outpatient visits per year. These facilities provide a broad spectrum of women's healthcare services, which include routine maternity care, high-risk obstetrical care, well-woman care, and both pre- and postmenopausal gynecologic care. The clinic provides patient access to gynecologic and obstetrical ultrasounds, urogynecologic procedures, colposcopy, minor gynecologic surgery, antenatal evaluation, and laboratory diagnostic services.

The department prides itself in providing care to a diverse population of women from adolescents to senior adults, encompassing all ethnic and socioeconomic groups, including indigent care. Under the supervision of faculty, clinic clerks obtain experience in obstetrical and gynecologic care and learn about the special needs of the female population. In addition, the faculty supervises a continuity clinic for resident physicians in the postgraduate training program. The department supports the concept of physician extenders and has an active women's healthcare nurse practitioner involved in outpatient obstetrical and gynecologic care.

The faculty members of the department are recognized experts in women's healthcare and serve as a referral center for both institutional and community based primary care physicians. The department supports other clinical departments in the institution by providing consultation on issues pertaining to women's healthcare. The department participates in the preclinical education of medical students by providing and presenting expert content in the reproductive systems courses to prepare students for their clinical years and their licensing examinations. In addition to their educational responsibilities, department members supervise and administer an obstetrical and gynecologic residency program in association with the Osteopathic Medical Center of Texas. Residents, in turn, support the mission of the institution in part by participating in education and serving as role models for aspiring physicians. The faculty also provide inpatient care of obstetrical and gynecologic patients and provide a broad range of state-of-the-art surgical and obstetrical services, providing comprehensive care for our burgeoning population.

The department members manage labor and obstetrical delivery, major and minor in-hospital gynecologic surgery, including minimally invasive surgery, urogynecology, pelvic reconstructive surgery and gynecologic oncology. The faculty supports postgraduate education and advancement as well as research and scholarly activity pertaining to women's healthcare by participating in educational conferences, clinical case reviews, grand rounds and journal clubs. In keeping with the osteopathic tradition, faculty members are actively involved in national, local and institutional service activities with osteopathic professional associations. The department takes pride in its role in promoting women's healthcare and in familiarizing students, the community and the medical profession with the unique needs of reproductive health.

# Faculty Roster

# Anderson, Ralph MD, FACOG, FRCS (C)

Assistant Professor and Chair FRCS University of Western Ontario MD University of Western Ontario

#### Adams, Robert C., DO, FACOOG

Associate Professor and Associate Dean BS Northeast Missouri State University DO Kirksville College of Osteopathic Medicine

#### Bailey, Phillip MD, FACOG

Assistant Professor BA Huntingdon College MD University of Alabama School of Medicine

### Boone, Melchor MD, FACOG

Assistant Professor BA St. Mary's University MD University of Texas Medical School Houston

Buchanan, Steve P., DO, FACOOG Associate Professor BS University of Texas at Arlington DO Texas College of Osteopathic Medicine

Chapman, John M., DO, FACOG Associate Professor and Clerkship Director BS Northeast Missouri State University DO Kirksville College of Osteopathic Medicine

#### Chu, Khoi MD, FACOG

Assistant Professor BS University of Florida MD University of South Florida College of Medicine

#### Crowley, Kathleen MD

Assistant Professor BA Texas Christian University MD Baylor College of Medicine

#### DeLeon, Frank MD, FACOG

Assistant Professor BA Princeton University MD University of Utah

Elliot, Peter MD, FACOG Assistant Professor MD University of Oklahoma, College of Medicine

# Hantes, Jeffrey, DO

Assistant Professor BS Southwest Texas State University DO University of North Texas Health Science Center

Hardick, Leslie DO Assistant Professor BS University of North Texas DO University of North Texas Health Science Center

Hinkle, Jennifer, MD Assistant Professor BS University of South Carolina MD Medical University of South Carolina

#### Hinkle, Kollier, MD

Assistant Professor BS University of South Carolina MD Medical University of South Carolina

#### Kobs, Tracy, MD, FACOG

Assistant Professor BS University of Oklahoma MD University of Oklahoma School of Medicine

#### LaCoco, Salvatore, MD, FACOG

Assistant Professor BA Constantine College of Liberal Arts/ University of Dallas MD Texas Tech University

#### Massingill, G. Sealy, MD, FACOG

Assistant Professor and Vice Chairman BA University of Texas Austin MD University of Texas Medical School at Houston

### Moreland, David, MD, FACOG

Assistant Professor BS Louisiana State University MD Louisiana State University School of Medicine

# Rindfusz, David, MD, FACOG

Assistant Professor BA Indiana University MD Indiana University School of Medicine

# Roberston, Kathleen, MD, FACOG

Assistant Professor BS University of Minnesota MD University of Minnesota

#### Robles, Guillermo, DO

Assistant Professor BS from University of Texas at El Paso DO University of North Texas Health Science Center

#### Speaks, Lynn, DO

Assistant Professor BS University of Texas Health Science Center at San Antonio DO University of North Texas Health Science Center

Tatum, G. Douglas, MD, FACOG Assistant Professor BS Texas Christian University MD Tulane Medical School

# Affiliated Faculty

#### Clinical Associate Professor

Hayes, Vernon M., DO, FACOOG Howard, Thomas, MD, FACOG Quist, Carolyn, DO Tabor, Bannie, MD, FACOG

**Clinical Assistant Professor** 

England, Michale, MD McWherter, Joseph, MD, FACOG

Adjunct Porfessor Berquist, Carol, MD

# Emeritus Faculty

Walker, Lee J., DO, FACOOG Professor Emeritus

# Pathology and Anatomy As the scientific basis of clinical medicine

As the scientific basis of clinical medicine and a clinical medical specialty, Pathology contributes in a prolific fashion to the teaching/adult learning activities of TCOM's integrated medical education curriculum particularly in the first two years. This includes major commitments both in the MPAS program and the medical school [MS] curriculum. It begins most prominently with the MS Mechanisms of Disease Courses, in Year One, and is an integral and significant contributor to the MS System II Courses in Year Two.

Pathologists emphasize the clinical utilization of laboratory data and relevant, targeted pathophysiology in the MPAS program.

Scholarly interests of the pathology faculty center upon innovative medical educational methodologies emphasizing active learning formats and computer-assisted instruction. Other interests include forensic pathology/ anthropology, forensic DNA methodologies, the molecular basis of neoplasia in surgical pathology and transfusion medicine and practical clinical applications of certain pleuropotential blood and bone marrow cell lines.

The department includes a large and sophisticated DNA/Identity Laboratory whose activities encompass human forensic identification/ paternity and vector/tick-borne analyses utilizing a diversity of modern scientific techniques.

These include RFLP, PCR and both nuclear and mitochondrial DNA methodologies. Our spectrum of highly significant programs center upon active participation in CODIS (the Combined DNA Indexing System) with the Federal Bureau of Investigation, working agreements and grants with the National Institutes of Justice, and the Texas Missing Persons DNA Database supporting the State of Texas, with additional programs in conjunction with the National Center for Missing and Exploited Children. Departmental Ph.D. molecular biologists conduct a large and competitive Master's program in Forensic Genetics, although this graduate school program is formally under the administration of theDepartment of Cell Biology and Genetics (See Graduate School of Biomedical Sciences Catalogue for information concerning this program).

The Department of Pathology and Anatomy maintains numerous activities for continuing and professional education in its Biomedical Skills Research and Education Facility, a substituent part of the Gross Anatomy Laboratory.

# Faculty Roster

Putthoff, Stephen L., DO, FCAP Chair and Associate Professor BS University of Missouri DO University of Health Sciences

Aschenbrenner, John E., PhD Associate Professor BS Iona College MS Rutgers University PhD Baylor University

**Cunningham, Linda F., MD, FCAP** Associate Professor BS University of Alabama MD Vanderbilt University

Eisenberg, Arthur J., PhD Professor BS, MS and PhD State University of New York at Acting Chair and Associate Professor (Allergy Albany and Immunology)

# Nizzi, Frank, DO

Associate Professor and Vice Chair BS Texas A&M University DO University of North Texas Health Science Center

Planz, John V., PhD Associate Professor BS State University of New York at Oswego PhD University of North Texas

Shingleton, Dennis P., MS, MBA Instructor

BS and MS Duquesne University MBA Texas Christian University

#### Warren, Joseph E., PhD

Assistant Professor BS Tulane University PhD University of North Texas

Williamson, Phillip, PhD Assistant Professor BS, MS and PhD University of North Texas

# Affiliated Faculty

Clinical Professor Hahn, Marc DO

#### **Clinical Associate Professor**

Hoblit, David, MD O'Shea, John Thomas, DO Vuitch, Milan, MD

# **Clinical Assistant Professor**

Austin, Dana, PhD Speights, V.O., DO Wasson, Lori, DO

# **Pediatrics**

Faculty members of the Department of Pediatrics have more than 140 combined years of clinical pediatric experience. They are actively involved in several national clinical research studies examining the care of newborns, infants, children and adolescents. A holistic emphasis is placed on patient care and teaching pediatric medicine to provide a foundation of knowledge sufficient to enter family practice residency programs. Clinical clerkships are available at the pediatric clinic at the University of North Texas Health Science Center, the Child Study Center and Cook Children's Medical Center (all in Fort Worth). In addition, Driscoll Children's Hospital in Corpus Christi, Texas Tech Health Science Center in Odessa and Wm. Beaumont Army Medical Center in El Paso provide students with ongoing pediatric inpatient exposure. Subspecialty areas include perinatology, neonatology, pediatric infectious disease, orthopedics, hematologyoncology, allergy and immunology, gastrointestinal disorders, cardiology, neurology, rheumatology, genitourinary disorders, genetic and endocrine-metabolic disorders, and adolescent medicine.

# Faculty Roster

Fling, John A., MD, FAAP

Acting Chair and Associate Professor (Allergy and Immunology) BS Southwest Texas State University MD University of Texas Health Science Center at San Antonio

#### Alexander, Deborah, PA-C

Instructor BS Physician Assistant Studies University of Texas Medical Branch at Galveston

#### Gilfillan, Bruce G., DO, FACOP

Associate Professor BA University of Pennsylvania DO Philadelphia College of Osteopathic Medicine

#### Kinsay, Toyya, DO

Assistant Professor BS Lamar University DO UNT Health Science Center, Texas College of Osteopathic Medicine

#### Levine, Alan, DO, FACOP

Associate Professor BS Drexel University DO Philadelphia College of Osteopathic Medicine

Levine, Marianne, DO, FAAP Assistant Professor

BS and MS University of Texas at Tyler DO Texas College of Osteopathic Medicine

#### Matches, Sarah, DO, FAAP

Assistant Professor BS and BA Northeast Missouri State University DO Texas College of Osteopathic Medicine

#### Pagels, Patti, MPAS, PA-C

Assistant Professor BA University of Texas at El Paso BS/PA University of TExas Southwestern Medical School at Dallas MPAS University of Nebraska

### Perett, Jana, PA-C

Assistant Professor BS Physician Assistant Studies Texas College of Osteopathic Medicine

# Podgore, John K., DO, FAAP

Professor (Infectious Disease) BA University of Michigan DO University of Osteopathic Medicine and Health Sciences

# Affiliated Faculty

Clinical Professor Lanier, Bobby, MD

# **Clinical Associate Professor**

Bowman, W. Paul, MD Cunninham, James, MD Dambro, Nancy, MD Dyson, Maynard, MD Forman, Mitchell, DO Kukolich, Mary K., AB, MD Pfaff, Kenneth, MD Riley, William, MD

**Clinical Assistant Professor** Carrizales, Eva D., DO Chintapalli, Meenakshim MD

Cowan, Michael, DO, FAAP Etuknwa, Udauk, MD Hadeed, Sami, MD Laney, Mark, MD Levy, Neil S., DO Lund, Gregg C., DO Reed, William J., MD Robbins, Bart, DO Ryals, Brian, MD Tam, Vincent, MD Wylie, Kevin, DO

PA Preceptor/Clinical Instructor

Hedayati, Mohrokh, MD Glyn, Janene R., MD

# Pharmacology and Neuroscience

The Department of Pharmacology and Neuroscience teaches topics related to drugs and therapeutics to medical, graduate, physician assistant and public health students and has been recognized for its commitment to excellence in education.

The department serves as the headquarters for the Institute for Aging and Alzheimer's Disease Research, led by James W. Simpkins, PhD. The department's research in aging and Alzheimer's disease is a key contributor to the institution's expertise in those areas.

Faculty members direct active research programs focusing on the molecular mechanisms underlying neurodegenerative diseases such as Alzheimer's disease and stroke, as well as other pathologies, including schizophrenia, drug and alcohol abuse, retinal degeneration, glaucoma, hypertension, and atherosclerosis. Faculty members are also actively engaged in drug discovery projects that are developing safe and efficacious treatment for these and other pathologies. In addition to disease-targeted research, the department also sponsors research into the basic molecular mechanisms of drug action.

# Faculty Roster

Simpkins, James W., PhD Chair and Professor BS and MS University of Toledo PhD Michigan State University

Das, Hriday K., PhD Professor BSc University of Calcutta PhD University of Nebraska

**de Fiebre, Christopher, PhD** Assistant Professor BA University of Minnesota PhD University of Colorado

**Diban, Adnan, PhD** Research Assistant Professor PhD University of North Texas Health Science Center

**Dillon, Glenn H., PhD** Professor and Associate Vice President, Research and Biotechnology Administration BS Southwest Missouri State University MS and PhD University of Illinois at Urbana-Champaign

Forster, Michael J., PhD

#### Gatch, Michael B., PhD

Research Assistant Professor BA University of Chicago MA University of Houston PhD Utah State University

#### Hayrapetyan, Volodya, PhD

Research Assistant Professor BS Moscow Pedagogical Institute MS Yerevan State University PhD Center of Biophysics, Armenian Academy of Sciences

#### Huang, Ren-Qi, PhD

Research Assistant Professor MD Shanghai Medical University PhD Chinese Academy of Sciences

Jung, Marianna, PhD Research Assistant Professor BS & MS Ewha Woman's University MS & PhD University of North Texas Health Science Center

King, George, PhD Research Associate Professor BA Emory University PhD State University of New York at Stony Brook

Koulen, Peter, PhD Associate Professor BS and MS, Johannes Gutenberg-University PhD Johannes Gutenberg-University

Krishnamoorthy, Raghu R., PhD Research Assistant Professor BS, MS and PhD University of Bombay

Luedtke, Robert R., PhD Professor BA and BS University of Illinois at Urbana-Champaign PhD University of Pennsylvania

Machu, Tina, PhD Associate Professor PhD University of Texas at Austin

Martin, Michael W., PhD Assistant Professor and Assistant Dean for Academic Affairs BS Colorado State University PhD University of Texas at Houston

**Oglesby, Michael, PhD** Professor BA University of Chicago PhD State University of New York at Buffalo

Pearce, Virginia, PhD Research Assistant Professor BA Louisianan Tech University PhD University of North Texas

**Prokai-Tatrai, Katalin, PhD** Research Assistant Professor BSc, MSc and PhD Univerty of Veszprem

Ratka, Anna, PhD, PhamD, RPh Associate Professor PhD, PharmD, and RPh College of Pharmacy, Idaho State University

#### Rybalchenko, Volodymyr, PhD

Research Assistant Professor MS Moscow Institute of Physics & Technology PhD Institute of Bio-organic Chemistry, National Ukrainian Academy of Sciences

Schetz, John, PhD Associate Professor PhD University of Florida

#### Singh, Meharvan, PhD

Assistant Professor BS University of Florida PhD University of Florida

### Sumien, Nathalie, PhD

Assistant Professor BS University of Florida PhD Southern Methodist University

#### Yan, Liang-Jun, PhD

Research Associate Professor BS Peking University MS, Institute of Biophysics, Chinese Academy of Science PhD University of California at Berkeley

#### Yang, Shaohua, PhD

Research Assistant Professor PhD University of North Texas Health Science Center MD School of Medicine, Beijing Medical University

#### Yorio, Thomas, PhD

Professor, Vice President, Research and Dean, Graduate School of Biomedical Sciences BA H.H. Lehman College PhD Mt. Sinai School of Medicine

# Affiliated Faculty

Adjunct Associate Professor Pang, lok-Hou, PhD Sharif, Naj, PhD

Adjunct Assistant Professor Page, Ray, DO, PhD Verstappen, Annita, PhD

P & N Instructor Hooper, C. Dan, RPh

Professor Emeritus Elko, Edward E., PhD Lal, Harbans, PhD, DLitt

# Professional Library Faculty

# Faculty Roster

Broyles, Kathy D., MLS, AHIP Assistant Public Services Librarian Instructor, Education BS Texas A & M – Commerce MLS Texas Woman's University

Burgard, Daniel E., MSLIS, AHIP Senior Director Public Services Assistant Professor, Education

BS, MSLIS University of Illinois at Urbana-Champaign

#### Carter, Bobby R., MS (LS)

Associate Vice President for Information Resources and Executive Director, Lewis Library Associate Professor, Education BS University of Houston MS (LS) Louisiana State University

#### Crenshaw, Clayton, MSLS

Access Services Librarian Instructor, Education BA Baylor University MSLS University of North Texas

#### Elam, Craig S., MLS, AHIP

Senior Director Technical Services Assistant Professor, Education AB Stanford University MLS University of California at Berkeley

#### Leudecke, Katie, MLS, MS

Reference Librarian Instructor, Education BA Southwest Texas State University MLS and MS Texas Woman's University

#### Mason, Timothy D., MLS

Technical Services Librarian Instructor, Education BA University of Cincinnati MLS University of North Texas

#### Pepper, Catherine, MLIS

Instructional Services Librarian Instructor, Education BA Baylor University MLIS University of Texas at Austin

#### Smith, Lisa, MLS

Outreach Librarian Assistant Professor, Education BA Texas Tech University MLS University of North Texas

#### White, Sherry, MLS

Serials Librarian Instructor, Education BA Southwest Texas State University MLS University of Texas at Austin

# **Psychiatry**

The Department of Psychiatry provides services for JPS Health Network (JPSHN) and the University of North Texas Health Science Center at Fort Worth (UNTHSC). The Department of Psychiatry offers the following current programs:

- Psychiatric Emergency Center (PEC)
- Acute Psychiatric Center (APC)
- Consult and Liaison Services (C&L)
- Inpatient Adult Services (38 beds)
- Inpatient Adolescent Services (16 beds)
- JPSHN Outpatient Behavioral Services
   Stop Six
  - Viola Pitts (Como Pitts)
  - Northeast
- UNTHSC Outpatient ClinicUNTHSC Neuropsychiatry Mansfield Clinic

The JPSHN actively supports medical education as the primary sponsor of several residency programs, psychiatry included. The department of psychiatry accepts 4 residents each year into the four-year program. The medical staff is involved in the residency training programs, creating a strong commitment to academic pursuits.

The department of psychiatry has a full time faculty of sixteen (16) psychiatrists, three (3) part-time psychiatrists, two (2) psychologists and three (3) administrative support staff.

The Department of Psychiatry residency program has received full accreditation from the Accreditation Council for Graduate Medical Education (ACGME) and American Osteopathic Association (AOA).

The Department of Psychiatry has implemented a plan for a program of research training and research.

The Department of Psychiatry's clinical and educational responsibilities have been an important educational component of Texas College of Osteopathic Medicine (TCOM). The Department of Psychiatry's activities for the medical students include the following:

- Develop and maintain educational programs for medical student.
- Provide and teach comprehensive, high quality, cost-effective healthcare
- Medical interviewing, physical examination and physical diagnosis

The Department's mission is to provide the highest level of quality of care for the people of Texas through exemplary psychiatric medicine education, clinical practice, research and community service.

# Faculty Roster

# Podawiltz, Alan, DO

Chairman and Assistant Professor BS University of Oregon MS University of Oregon DO Oklahoma State University, College of Osteopathic Medicine

Alloju, Lisa D., DO Assistant Professor DO University of North Texas Health Science Center

#### Bleker, Edward, PhD Assistant Professor BS Southwestern University MS Stephen F. Austin State University PhD Texas Tech University

#### Djokovic, Marija, MD Assistant Professor MD University of Belgrade School of Medicine6

Etter, Gary, MD Vice Chairman and Assistant Professor MD University of Texas Medical Branch at Galveston

**Granado, Elma, MD** Assistant Professor MD University of Santo Tomas

Haqqani, M.A. Rahim, MD Assistant Professor MD Sindh Medical College

# Hawkins, Germaine, DO

Assistant Professor BS Texas A&M University DO University of North Texas Health Science Center

#### Houtz, Andrew, PhD

Assistant Professor BS University of Florida MS and PhD University of North Texas

# Klymiuk, Jadwiga, MD

Assistant Professor MD Medical School of Wroclaw

# Manjunath, Prema, MD

Assistant Professor MBBS Bangalore Medical College

# Mian, Muhammed M., MD

Assistant Professor MD Nishtar Medical College-Hospital

# Nati, Carol A., MD

Assistant Professor BS and MS St. John's University School of Art's and Sciences MD Oral Roberts University School of Medicine

Packard, Russell C., MD Professor MD University of California, Irvine

Siddiki, Lubna, MD Assistant Professor

Assistant Professor MD Dow Medical University, Karachi Pakistan

#### Silvas, Jose, MD

Associate Professor BS University of Texas at El Paso MD University of Texas Health Science Center at San Antonio

#### Suri, Muhammad, MD

Assistant Professor MBBS Army Medical College, Quaid-I-Azam University

Tukdi, Shakil A., MD Assistant Professor

# MD Dow Medical University, Karachi Pakistan

Williams, Delwin, MD Assistant Professor BS Earlham College MD University Texas Southwestern Medical School at Dallas

#### Winter, Scott, MD

Associate Professor BS Mississippi State University MD University of Mississippi

# Witschy, James, MD

Associate Professor BS University of Illinois MS University of Texas Health Science Center at San Antonio

# Surgery

The Department of Surgery is a multidiscipline academic unit committed to providing excellence in osteopathic surgical care through

emphasis on education, research, quality management, access and cost-effectiveness in a changing medical environment.

The department actively promotes a full spectrum of research and scholarly activity. Department faculty members pursue many research interests, including critical care, endocrine surgery, laparoscopic surgery, endovascular surgery, swallowing disorders, airway obstructive diseases, wound healing, clinical outcomes studies and a variety of clinical trials. Other areas include basic science research in cardiac metabolism and cardiopulmonary bypass.

# Faculty Roster

#### Olivencia-Yurvati, Albert H., DO, FICS, FACOS, FAHA Acting Chair and Professor

BS California State University DO Texas College of Osteopathic Medicine

#### Buchanan, Sam W., DO, FACOS

Associate Professor BS Texas Christian University DO Texas College of Osteopathic Medicine

#### Hoxha, Besim, MD

Research Instructor MD University of Prishtina School of Medicine

#### Fikkert, Arnold, DO

Assistant Professor BS Baylor University MA Baylor University DO University of North Texas Health Science Center

#### Grimes, Kelley, D.O.

Assistant Professor BS Texas Christian University DO University of Health Sciences College of Osteopathic Medicine

#### Hahn, Marc B., DO

Professor and Dean BS Syracuse University DO Des Moines University

#### Hill, Laurie, PA-C

Assistant Professor BA, Southern Connecticut State University MHS, Quinnipiac College

### Malik, Muhammad Aslam, MD

Assistant Professor BS and MD University of the Punjab

#### McReynolds, David B., MD

Assistant Professor BS University of Colorado MD University of Colorado School of Medicine

#### Peska, Don, DO, FACOS

Associate Professor and Associate Dean for Graduate Medical Education BS Brooklyn College DO College of Osteopathic Medicine and Surgery

#### Phillips, Randall R., DO

Assistant Professor BS Southwestern Union College DO Texas College of Osteopathic Medicine Prather, Irvine, D.O. Associate Professor BS Maryville College MS Virginia Polytechnic Institute and State University DO West Virginia School of Osteopathic Medicine

#### Affiliated Faculty

Clinical Professor Otero, Angelo L., MD

#### **Clinical Associate Professor**

Classen, Ashley M., DO Erez, Eldad, MD Rittenhouse, David R., DO, FACOS Sanfelippo, Peter, MD Smith, H. Gerhart, DO, FAOAO Stephenson, Gerald R., MD

#### **Clinical Assistant Professor**

Blumenthal, Scott, MD Bradlev, William, MD Dickerman, Rob D., DO, PhD Ferrara, Craig A., DO Gonzalez-Davila, Adolfo, DO Griffin, Glenn A., DO Guyer, Richard, MD Hall, Stephen, DO Hayhurst, James C., MD Heistein, Jonathan, MD Henry, Shawn, DO Hisey, Richard, MD Hull, Christopher K., DO Korenman, Michael D., MD LaManna, J.L., III, DO Pearce, David, MD Ranelle, Robert G., DO Smith, Gregory H., DO, FACOS Stroud, Robert DO Syrquin, Abraham F., MD Wallace, William E., DO Young, Todd E., DO

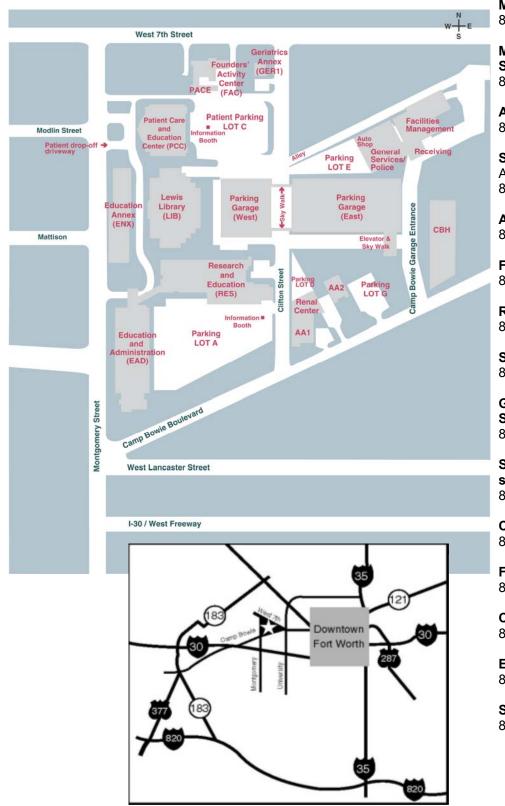
#### **Clinical Professor**

Urey, Dianne, PA-C

#### **Emeritus Faculty**

Jenkins, William R., DO, FACOS Professor Emeritus Stern, Paul, DO Professor Emeritus

# Campus Map & Phone Numbers



Medical Student Admissions 817-735-2005

Master of Physician Assistant Studies Admissions 817-735-2301

Accounting (Student Receivables) 817-735-2548

Student Affairs Associate Vice President 817-735-2505

Academic Support Services 817-735-2409

**Financial Aid** 817-735-2520

Registrar 817-735-2201

Student Development 817-735-5006

Graduate School of Biomedical Sciences Admissions 817-735-2560

School of Public Health Admissions 817-735-2252

Central Family Practice Clinic 817-735-2228

Founders' Activity Center 817-735-2209

Campus Police 817-735-2210

Emergencies 817-735-2600

Switchboard 817-735-2000

